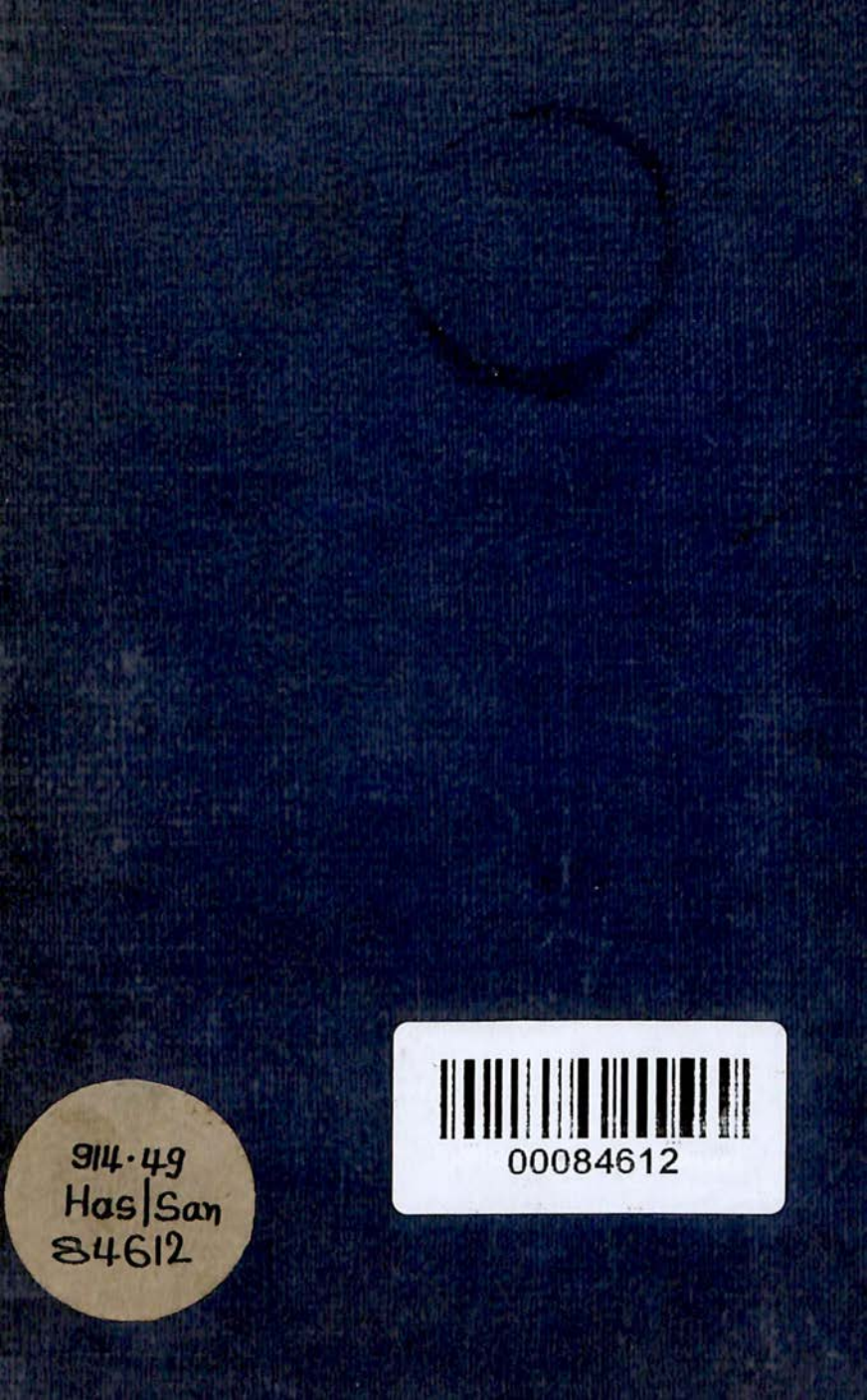
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SAN REMO

AND

THE WESTERN RIVIERA

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SAN REMO

FROM THE EAST

SAN REMO

AND

THE WESTERN RIVIERA

CLIMATICALLY AND MEDICALLY

CONSIDERED

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a1

BY

ARTHUR HILL HASSALL, M.D. LOND.

MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS OF ENGLAND
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FOR CONSUMPTION AND DISEASES OF THE CHEST

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'Connais-tu le pays où fleurit l'oranger,
Où la brise est plus douce et l'oiseau plus leger,
Où rayonne et sourit comme un bienfait de Dieu
Un éternel printemps sous un ciel toujours bleu?'

TO

SIR GEORGE BURROWS, BART., M.D.

AND

RICHARD QUAIN, M.D., F.R.S.

IN GRATEFUL RECOLLECTION OF MUCH PROFESSIONAL CARE

AND KINDNESS DURING A LONG AND SEVERE ILLNESS

This Work is Dedicated

BY

THE AUTHOR

PREFACE.

VERY much has been written on the Western Riviera, as might naturally be expected from the marvellous beauty of the district and the exceptional mildness of the climate. Owing to the mountainous and rocky character of the shore extended along the bluest of seas, views innumerable of the loveliest kind greet the eye in every direction, while much of the vegetation met with is semi-tropical and therefore altogether different from that of colder and more northerly lands. The Riviera, indeed, abounds in interest for the Poet, the Artist, and the Naturalist, especially the Geologist and Botanist. Much as has been written upon it, the theme is by no means exhausted, and a wide field still exists for further observation and research.

Of the monographs and works hitherto published none, thus far, treat exclusively or at all exhaustively of the whole of the Western Riviera, that is to say of the shore of the Mediterranean lying between Nice and Genoa. The general characteristics of its climate have

frequently been pointed out and some of the more important towns fully described, both in their general and medical aspects, but of some of the other towns the accounts given are exceedingly brief and, in some instances, places of interest from a health point of view have been overlooked altogether. Of the present work it may be said, that it is based upon actual observation during two winter seasons: I have explored the whole of the district and have visited and carefully examined, making notes on each occasion, every one of the cities and towns mentioned. These explorations were to me a source of infinite pleasure and the labour involved, though considerable, was of a thoroughly congenial character.

Having myself unfortunately suffered, some years since, from an affection of the chest, and having founded a large Hospital for that class of diseases in the most favoured climate which the British Isles afford, The National Hospital for Consumption and Diseases of the Chest on the Separate Principle, I was enabled to judge from practical knowledge, how far the climate of the Riviera is adapted to persons afflicted with diseases of the organs of respiration.

I have now to express the obligations I am under to the following for their valuable aid: Cavaliere Francesco Panizzi, for many of the names of the Alpine Plants met with; Signor Benedetto Musso, for information as to the

Birds of the Riviera; and Dr. Giuseppe Ameglio, for particulars respecting the sanitary state of the town of San Remo: to Dr. Günther of the British Museum, for the identification of some of the Mediterranean Fish; Mr. Edgar Smith of the same Institution, for the names of some of the Mollusca; and to Mr. Goodchild of Bordighera, whose sketch forms the Frontispiece of the work. I have also to thank Mr. Evans of Ampton Place, W.C., for the care and skill with which he has executed the Wood Engravings.

Finally, I would acknowledge the great assistance I have received from my Wife, who has been my kind amanuensis and able helper throughout the whole progress of the work.

VILLA CARLI, SAN REMO, ITALY.

49 WOBURN PLACE, RUSSELL SQUARE, LONDON.

September, 1879.

CONTENTS.

CHAPTER I.

SAN REMO.

PAGE

Situation — The Bay — The Sheltering Hills and Mountains — History — The Old Town—Its Architectural Peculiarities — The New Town—The East and West Suburbs—The Port—The Sea Baths — The Campo Santo—Sanitary Condition of the Town—The Water Supply—Analyses of Fountain and Well Water—Necessity for a New Supply—Rain Water—The Drainage—Town Refuse—The San Remese—Servants—Washing—Dress of the San Remese—Walks and Drives—Amusements 1-33

CHAPTER II.

Food Supplies at San Remo—Mediterranean Fish—Sale of Small Birds—Vegetables—Fungi—Fruit—Many articles partaken of in France and Italy, not used as Food in England—Indiscriminate Slaughter of Small Birds 34-45

CHAPTER III.

Geology of the District—The Winds—Prevailing Winds—Sea and Land Breezes—Rainfall—Temperature—Warmth of the Mediterranean—Saltness—Variation of Meteorological Observations —Division of Seasons—Temperature of San Remo and the other

PAGE

Health Resorts of the Riviera—These Contrasted—The Winter Temperature of San Remo and Hyères contrasted with that of London and Kew—Number of Sunshiny, Cloudy and Rainy days at San Remo, Mentone, Nice, Cannes, &c.—General Characteristics of the Climate of the Riviera—Winter in the Riviera—Table of mean Temperatures—Opinions of Medical Writers relative to the Climate of San Remo 46–85

CHAPTER IV.

Characteristic Vegetation of the Riviera—Shrubs and Flowers in blossom at San Remo in October and at the beginning of the Year—Scent-giving Flowers, Wild Shrubs, Plants, and Flowers—Vegetation of the Riviera chiefly evergreen—Evidence of Mildness of the winter climate of the Riviera derived from the Vegetation—The Olive tree—Gathering of the olives—Process of obtaining the oil—The Lemon tree—The Orange tree—The Eucalyptus—The Pepper tree—The Prickly Pear—Evidences of Mildness of the climate derived from Birds, Fish, Reptiles, and Insects—Mosquitoes—Curious and rare Animal Productions 86–126

CHAPTER V.

Chief Characteristics and Effects of the Climate of San Remo—Conditions and Diseases for which it is best Adapted—Affections and Diseases for which the Climate is Unsuited—The opinions of Medical Authors as to the Climate of San Remo—Diseases from which the Native Population are Exempt, and those to which they are mostly Liable—Saline Matter in the Air—Effects of the Dryness of the Air of the Riviera—Excitability — Sleeplessness — Winter in the Riviera — Beneficial Effects derived from change of Climate in Diseases of the Lungs—Choice of Residence at San Remo—Want of an Esplanade at the east end of San Remo—Want of Paths up some of the Valleys—Precautions to be observed by Invalids—Proper

PAGE

times for Arrival and Departure—A single Winter's Residence insufficient — Characteristics of a suitable Summer Resort—Dr. Richardson's Atlantis for Consumption . . 127–152

CHAPTER VI.

EAST OF SAN REMO: The San Francia Valley; Chapel of San Giovanni—The Olive Mills—Chapel of San Michele. The Bestagna Valley; Church of San Pietro—Croce di Parà—Chapel of Villetta. The Martino Valley; The Chocolate Mill —The Corn Mills—Verezzo. The Vallée des Oliviers. Capo Verde and the Chapel of the Madonna della Guardia. The Valley of Ceriana; Poggio—Ceriana. The Valley of Taggia; Taggia—Castellaro—Madonna di Lampeduza. WEST OF SAN REMO: The San Romolo Valley; The Madonna del Borgo—East side of the Valley—San Romolo—Piano del Rè—Monte Bignone. The Foce Valley; Chapel of San Bartolomeo—Chapel of San Lorenzo—Descent of the Mossè and Foce Valleys —Walk in the Foce Valley. The Bernardo Valley; Chapel of San Bernardo—Madonna di Bonmoschetto—Colla . 153–201

CHAPTER VII.

OSPEDALETTI. BORDIGHERA — Description — Climate — Palm Groves. VENTIMIGLIA— Description— The Roya— Climate— Not a Health Resort—Fortress—Conglomerate. MENTONE— Situation—Encircling Hills and Mountains—Carei Valley— Boirigo Valley—Gorbio Valley—Eastern Bay—Western Bay— The Old Town—Mentone Valley—St. Jacques Valley—Walks and Drives — Meteorology — Climate. MONACO — Climate. MONTE CARLO—Village—Climate. EZE—Climate. BEAULIEU —Climate. VILLEFRANCHE—as a Health Resort. NICE— Vegetation — Surrounding Mountains — Climate — Opinions of Medical Writers. CARABAÇEL—Suburb of Nice. CIMIEZ— Climate. CANNES — Description — Vegetation — Drainage — Town Refuse — Water Supply — Mistral — Meteorology — Climate 202–244

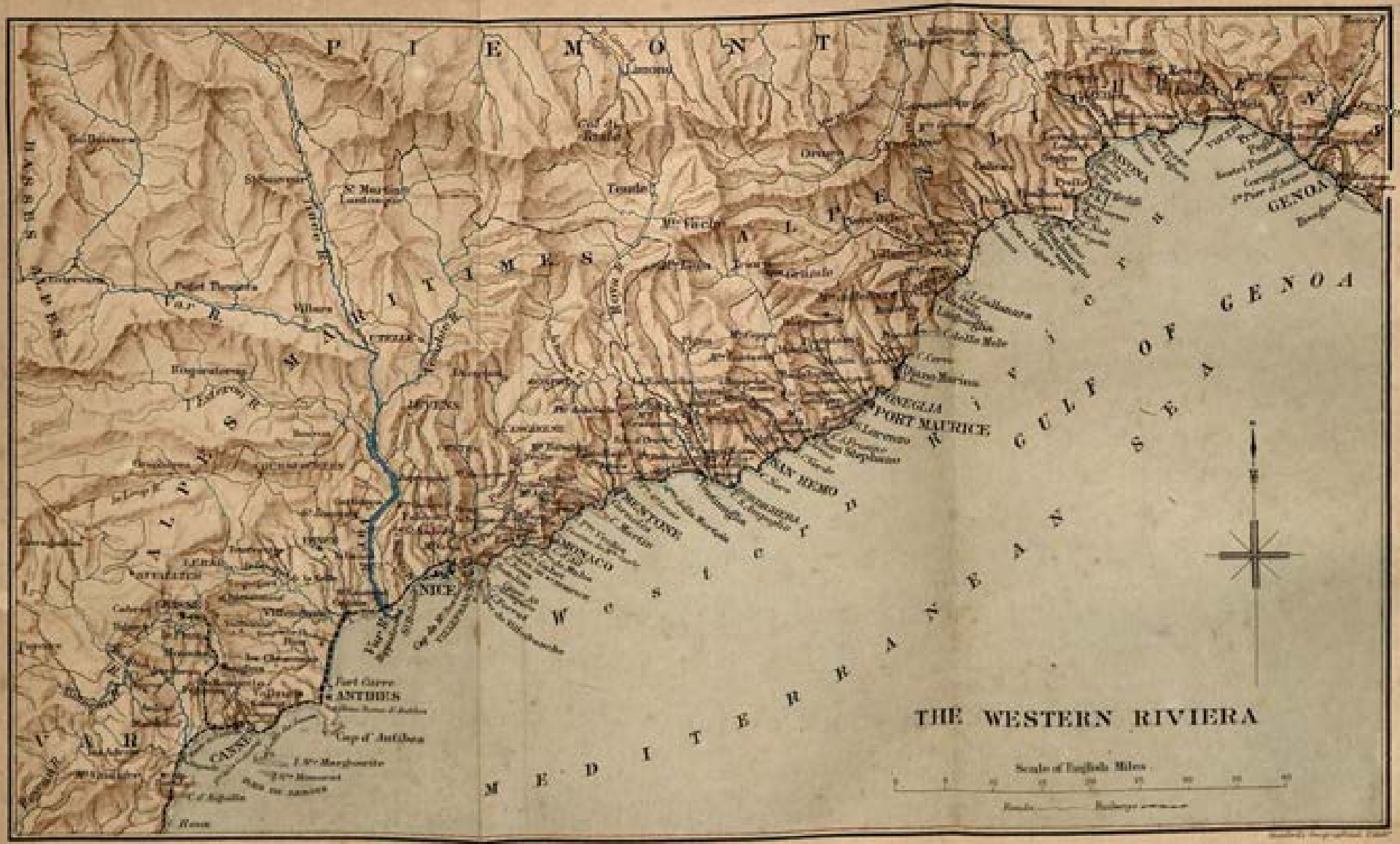
CHAPTER VIII.

PAGE

PORTO MAURIZIO—Vegetation—Climate. ONEGLIA—Vegetation—Climate. DIANO MARINA—Vegetation—Climate. ALASSIO—Bay—Surrounding Mountains—Vegetation—Meteorology and Climate. ALBENGA—Climate. CERIALE—LOANO—PIETRA—VEREZZO—FINALMARINA—Grand Road to Noli. NOLI—Fishing—Vegetation. SAVONA—Climate. ALBISSOLA—VARAZZE—MONTE GROSSO—Situation—Special Features—Vegetation chiefly Firs—Likely to become an Important Health Resort—COGOLETO—Vegetation. ARENZANO—Beautiful Situation—Vegetation—Mild Climate. VOLTRI—Sulphur Springs—Vegetation. PRA—Vegetation. PEGLI—Vegetation and Climate. SESTRI—Vegetation and Climate. CORNIGLIANO—Suburb of Genoa—Comparative absence of Vegetation. GENOA—Situation—Beauty—Vegetation—Climate 245–271

INDEX 273–279

MAP OF RIVIERA . . . . . *to face p.* 1



THE WESTERN RIVIERA

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„	96	„	Symphytum officinalis	„	Symphytum officinale
„	103	„	Crassulaceæ	„	Umbelliferæ

SAN REMO

AND THE WESTERN RIVIERA

CHAPTER I.

SAN REMO.

Situation—The Bay—The Sheltering Hills and Mountains—History—The Old Town—Its Architectural Peculiarities—The New Town—The East and West Suburbs—The Port—The Sea Baths—The Campo Santo—Sanitary Condition of the Town—The Water Supply—Analyses of Fountain and Well Water—Necessity for a New Supply—Rain Water—The Drainage—Town Refuse—The San Remese—Servants—Washing—Dress of the San Remese—Walks and Drives—Amusements.

THE lovely and highly favoured district extending along the shores of the Mediterranean from Nice to Genoa is known by the names of the Western Riviera, Riviera di Ponente, and Genoese Riviera, Riviera di Genova, and the scarcely less lovely region lying between Genoa and Lucca by the name of the Eastern Riviera, Riviera di Levante.

San Remo, a town of 16,000 inhabitants, is situated in the Western Riviera, in a beautiful bay of the far-famed Gulf of Genoa, about four miles in breadth: it lies in latitude 43° 48′, longitude from Rome 4° 43′, and faces the south-west: it is 16 miles from Mentone, 31 from Nice, and 85 from Genoa.

The bay describes a considerable segment of a circle, and, viewed from a height, it is seen that it is subdivided into four smaller bays. It is bounded by two bold headlands, that to the east, Capo Verde, 350 feet, and that to

the west, Capo Nero, called by some Cap-Pin, about 800 feet in height. From these promontories the mountains gradually rise until, behind the town, they reach an altitude in Monte Bignone of 4270 feet.

But the first sheltering barrier is formed by a series of seven hills, intersected by valleys, through which flow small streams, or, as they are here termed, torrents: these valleys run from north to south, and terminate in every case on the sides of the mountains in blind extremities. The hills and valleys are densely clothed with Olive trees, and in some of the valleys are groves of Lemon and Orange trees.

This first barrier of hills is succeeded by the range of mountains already referred to. These are not thrown up into sharp jagged peaks as at Mentone, but form an unbroken protecting chain and are mostly fir-clad.

Behind this second range lies a third, the Alpes Maritimes, with an elevation of 7000 and even 8000 feet; these, however, are not visible from the town itself.

Thus San Remo is enclosed and protected by a triple barrier of hills and mountains.

Dr. Walshe has so graphically sketched in a few words the chief topographical features of San Remo and its amphitheatre, that his description may here be quoted with advantage:

'Lying in a deep bay looking due south, the town, rising in a pyramidal form from the shore, is protected on the north by three successive groups of hills, ranging in height from 500 to 8000 feet, none of them cleft by torrent beds, and all free from broad gorges likely to give passage to the winds; hence the tramontane passes over the town to seaward, while two promontories shelter the bay to the east and west. Yet further protection is afforded by groves of Chestnut (Olive) trees, and at the highest level by Pine forests.'

The surrounding mountains describing a considerable segment of a circle, and extending some distance inland, a large area of ground is thus enclosed, forming a noble and well protected site, sufficiently extensive for the erection of a very large town.

A very good view of the hills and mountains surrounding San Remo may be obtained from the extremity of the pier or Mola, which forms the western boundary of the harbour, but a still better view from the sea at a little distance from the shore. There are also fine views from the two capes. From Capo Verde to the east not only is the town of San Remo with its surrounding mountains seen, but to the north the towns of Poggio and Bussana, and along the shore eastward Arma, Riva, and San Stephano; while from Capo Nero to the west, Bordighera, Monaco, the lighthouse of Villefranche, and sometimes even the Esterels, are plainly visible. In very clear weather, especially at sunrise and sunset, the picturesque and snow-capped mountains of Corsica come into view; this island lies a little to the south-east of San Remo and is about 80 miles distant. That it should be visible from it affords a striking illustration of the dryness and clearness of the atmosphere.

No one can fairly judge of San Remo who has not obtained a good view of its bay, its encircling mountains, and the extensive and sheltered area which these enclose.

With its triple range of hills and mountains, the latter unpierced by valleys through which wind can find access, San Remo is efficiently protected from the north, north-west or Mistral, and north-east or Bise winds, as also in part from the east and west winds; but, since the town faces the south, it is of course open to the southerly winds. It is thus that the mildness of the winter climate of San Remo is in part explained and insured.

San Remo is a very ancient town and was formerly one of much importance. Its early history, given in great detail by Girolamo Rossi in his 'Storia della Città di San Remo,' is truly remarkable and full of interest.

On the spot where San Remo now is, there formerly stood a town, probably founded many centuries ago by the Greeks, and named by them Leucotea. When the Romans became the conquerors of Liguria they changed the name of Leucotea to Matuzia, after Matuta, goddess of the sea.

The submission of Liguria to the Romans occurred under Augustus, B.C. 12.

The first Christian missionary who appears to have been sent to Matuzia was Ormisda; he was succeeded by his pupil, San Siro, after whom the cathedral of San Remo is named; and he again, A.D. 600, by Bishop Romolo, who lived for many years at the Hermitage, which is named after him, and where he died: his memory is still held in great veneration by the people, and the day of his death, October 13, is kept as a festival by the San Remese. He was buried in Matuzia, of which he was regarded as the patron saint, but in 876 his remains were removed to the cathedral of Genoa, in order to save them from desecration by the Saracens who came from Spain, and who at that period had obtained possession of the whole of Liguria. Prior to the invasion by the Saracens the country was overrun by the Goths and Vandals.

The Saracens held possession of Liguria until the year 972; the inhabitants of Matuzia in consequence of the invasion fled for refuge to the mountains, and only returned to their town after the expulsion of the Saracens by Count Guglielmo of Provence. They then rebuilt it, and named it San Romolo after their patron or guardian saint; this happened, according to Girolamo Rossi, in 979.

San Romolo became a free Republic about 1200; but, not being strong enough to maintain its own independence, it afterwards formed an alliance with Genoa. In 1297 San Romolo and Ceriana were sold by one of the Archbishops for 13,000 lire to Oberto Doria and Georgio di Mari; and in 1350 the Dorias, having become much impoverished by constant warfare, sold their rights to San Romolo to the Genoese Republic. The town then continued to flourish until the end of the 15th century, about which time its name was changed to San Remo. According to Rossi, the reason for this change of name is unknown, but Signor Bonetti believes that 'Remo' is a corruption of 'Eremo,' or 'Hermitage,' the patron saint having long lived in the Hermitage near San Romolo.

In the 16th century the town was visited by the plague, and afterwards suffered from attacks by Turkish pirates; these in 1548 were driven away for a time by Luca

Spinola, who defeated them in a battle fought near Varezzo, the spot being still marked by a cross, Croce di Parà. The anniversary of this battle, August 7th, is still observed by a procession to the church of San Donato at Varezzo.

FIG. 1.

Some time afterwards the Turks recommenced their attacks, and protecting towers were erected, some of which are still to be seen in different places along the coast. Next, the town in 1625 passed into the hands of the Duke of Savoy,

but reverted to Genoa at the end of the 18th century. During the wars of the Spanish Succession, it was frequently attacked, sometimes by the French and Spaniards, who were in alliance with Genoa, and at others by the Austrians and English. In 1797 a Republic of Liguria was formed, San Remo constituting a part of it under the name of 'The District of Palms.' Later the town became a sous-prefecture under Napoleon I., but on his fall Liguria was incorporated with the kingdom of Sardinia, and now belongs to Italy.

It thus appears that the town of San Remo has undergone many changes and vicissitudes, and that the ancestors of the present inhabitants truly lived in troublous and uncertain times.

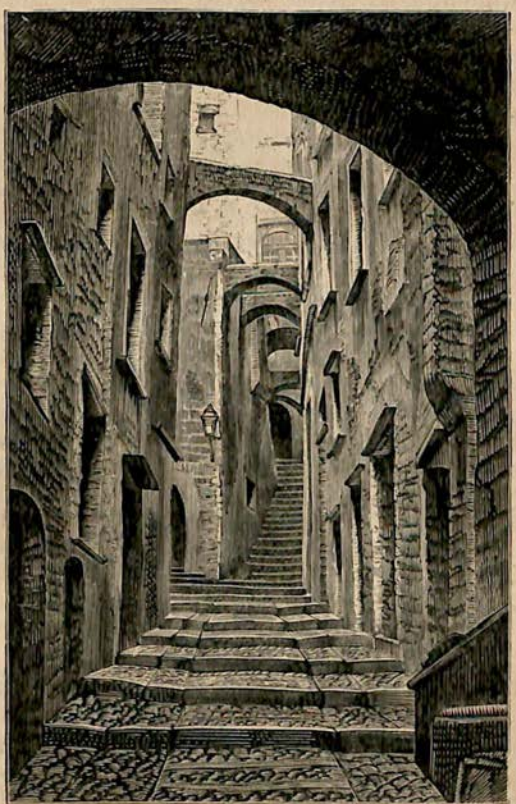
The traveller cannot fail to notice that nearly all the old towns on this coast are built on the steepest hills. The reason of this is, that they might the more readily be defended from the piratical attacks to which they were formerly so frequently subject. Thus situated the space was necessarily in most cases very limited, and the streets, in consequence, were made very narrow, and the houses at the same time exceedingly lofty. These circumstances therefore influenced very much the architecture of such towns. But there was still another reason, which was not without its influence on their construction—namely, the liability to shocks of earthquakes, which formerly were much more frequent than they have been of late years. This fear led to the strengthening of the houses by throwing across the narrow streets a number of supporting arches, which present in some towns, and particularly in San Remo, a very curious as well as picturesque appearance (fig. 1).

With these few preliminary remarks we will now enter the ancient town of San Remo, which still retains, after the lapse of centuries, many of its old structural features and characteristics.

The greater part of it is built on the southern slope and sides of the hill which terminates the long ridge which proceeds from Monte Bignone, and divides the

East and West Sanctuary Valleys, the road to San Romolo running on the top: the smaller portion of the town stands upon the ridge on the other side of

FIG. 2.



the West Sanctuary Valley, also known by the name of the San Romolo Valley, which separates the two ridges or hills. The town consists of sections or quarters, each of these having been formerly approached by separate

arched gateways, the arches in most cases being still intact. This arrangement was adopted for better defence, so that, if one of the quarters were captured, the others might still be defended.

On entering the town we find streets so steep that steps have been made to facilitate the ascent; so narrow, and the houses so lofty, that air and light penetrate in greatly diminished amount, and to some of the houses and dwellings scarcely at all (figs. 2 and 3). We also notice very many of the overhanging arches previously adverted to, and up the walls of some of the houses are seen the long, twisted stems of ancient vines, usually carefully protected for some feet above the ground by masonry, and which, when they have reached the tops of the five- and even six-storied houses, are there carefully trained over balconies. Under the shelter of these vines, which even at this altitude bear fruit, the inhabitants sit and enjoy the view of the olive-clad hills, the fir-covered mountains, and the deep blue Mediterranean. Small aqueducts are much used for the distribution of water and are often carried across the streams; one of these may be seen in the old town crossing the San Romolo torrent as shown in fig. 4.

The town was formerly surrounded by a wall with towers and possessed a castle; portions of the two former are still standing, and the foundations of the castle are yet visible.

Having thus given a sketch of the position and general features of the old town, this may now be described a little more in detail. Approaching it from the eastern end of the Via Palazzo, we notice on the left the pharmaceutical establishment of Signor Cav^e^ Francesco Panizzi, so widely known for his botanical researches, and who is now engaged on the study of the Fungi of the neighbourhood, his labours having already been rewarded by the discovery of several new species. Passing through an archway on the right hand side of the street we come to the Palazzo di Città, or Town-hall, where the Syndic and other officials have their offices. At the end of the Via

Palazzo is the Piazza del Mercato, or market-place; in the centre of this is a large and much used fountain of excellent water and several Plane trees; it is surrounded by many useful shops, while the stalls are well supplied with

FIG. 3.

vegetables and fruit, with poultry, and, in lesser quantities, game and fish.

At the north-west corner of the market-place the back

of the cathedral San Siro is seen, and close to this is the Baptistery.

From this point we may proceed upwards through any of the more curious streets which attract our notice until we reach the summit of the hill: this forms a large level space from which fine views are obtained of the sea and the surrounding hills, as well as of the Valle di Francia, or East Sanctuary Valley, and the San Romolo, or West Sanctuary Valley. On the northern part of this space is the Sanctuary of the Madonna della Costa, approached by a broad flight of steps. At the south-east and south-west corners of the Sanctuary are two small cupolas curiously inlaid with water-worn pebbles. The pictures and marbles on either side of the high altar are considered to be good.

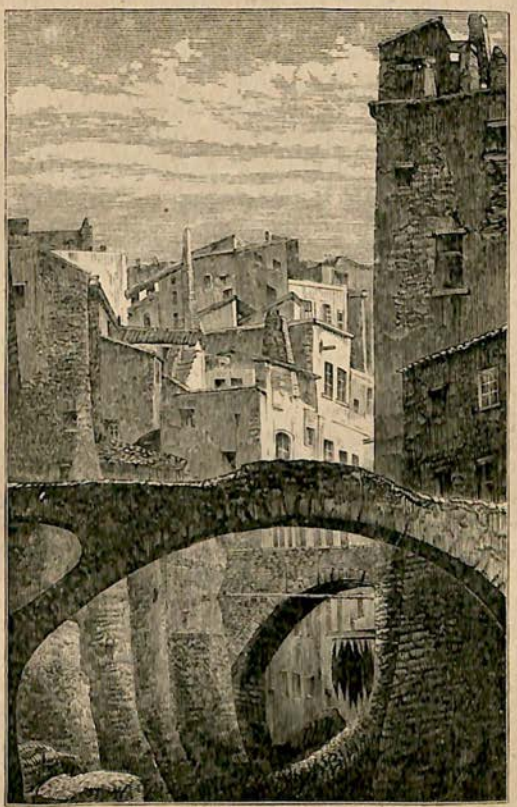
On descending from the Sanctuary, and at a little lower level, is 'Il Leprosario,' the Hospital for Lepers, which is said to be very well managed.

From this point the descent to the lower or new town is tolerably easy. Viewed from a distance, towns similarly situated to San Remo present no doubt to the eye a picturesque appearance, nor is this picturesqueness usually diminished by a closer inspection; certainly this is not the case with San Remo, which is one of the most curious and interesting old towns of the Riviera. But for all this quaint beauty and interest the poor inhabitants pay heavily; there is the toilsome daily ascent, the little less trying descent, the difficulty of carrying up water and other necessary supplies; the diminished air and light, and the frequent absence of sunshine, impairing health, and too often inducing disease. These disadvantages and evils are however, in the case of San Remo, less than might have been anticipated, and there is far more light, sunshine, and cleanliness than was to have been looked for; besides the present inhabitants enjoy in their dwellings and in their narrow streets, the inestimable blessing of the efficient light produced by gas and pètroleum.

We will now endeavour to give some idea of the newer portion of the town. The old high-road from Nice ran

through the narrow street, Via Francesco Corradi, the Piazza del Mercato, and the equally narrow Via Palazzo; along these all the heavy traffic, including the diligences,

FIG. 4.



which formed, before the days of the railway, the only mode of travelling, were obliged to pass; and in them many of the principal shops still are situated. But now there is a new, broader, more direct, and in every way

more convenient road; that portion of it which passes through the town is called the Via Vittore Emanuele, and from it several streets branch off on either side, the whole constituting what may be termed the new town of San Remo. In the Via Vittore Emanuele are many of the public buildings and offices, as well as numerous well-furnished shops of every description. Passing along the street from the western end, we notice in succession the Hotel International on the left, nearly opposite to which are the two Villas Carli, and next to these the Hotel San Remo, which stands at the west corner of the Via Andrea Carli. In this street is the very commodious and conveniently placed English Church, and of which the Rev. G. L. Fenton has been for many years the Chaplain. At the east corner of this street is the Asile Corradi, a school built and endowed by Dr. Corradi, a native of San Remo. Further on, in the Via Vittore Emanuele, on the left, is the Pension Suisse, the Post Office, the residence of the Sous-Préfet, and a little beyond is the Via Feraldi, leading to the market. A few yards further on is the Via Privata; in this are the offices of Messrs. W. & J. Congreve, house agents, and also those of the English Vice-Consul, Walter Congreve Esq., M.A. Next to these are some recently opened public baths; these are well arranged and very clean, and since they supply what has hitherto been a great want in the town, it is to be hoped they will be well patronised and prove successful. At the end of the Via Privata, is the Palazzo Roverizio, with an archway leading into the Via Palazzo. Returning to the Via Vittore Emanuele, and on the same side of the way, is the Palazzo Borea, at the corner of the Via Cavour, built in the 15th century, and which originally must have been a handsome building: the lower portion now consists of shops, but the upper part is occupied by the Marquis Borea.

Next is the Via Principe Amedeo, in which is the well-appointed theatre. The Via Vittore Emanuele shortly afterwards terminates in the Piazza Colombo, a kind of market-place, where carts, arriving from the country with provisions, take up their stand.

Returning now to the Asile Corradi, on the same side of the way, is the bank of Messrs. Rubino, and the establishment of Mr. Squire, the English chemist, and next to it the new Square and gardens, now in course of construction. A little further on is the Via Gioberti in which is the Hôtel Beau Séjour, and, at the end of it, the Custom House and Port. After passing this street are noticed the bankers, Messrs. Asquasciati Frères, and the Circolo Internazionale or Club, with reading, billiard, and reception rooms; the photographic establishment of Signor P. Guidi, whose coloured photographs of the Lemon, Olive, and Eucalyptus trees, as well as of many of the rarer wild flowers, are so extremely beautiful and natural; and lastly, the Hôtel Grande Bretagne. This brings us once more to the Piazza Colombo. The number of shops of all kinds is now so considerable that it would be impossible to enumerate even the principal, but the establishment of Messrs. Ajcardi, stocked with perfumes made from flowers mostly grown in the neighbourhood, may be specially referred to.

It now only remains that a description should be given of the west and east suburbs of the town, in which are situated the principal hotels, pensions, and villas.

Commencing westward, at the Villa Luigia Ponente, on the left-hand side is the Hôtel des Anglais, next the West End Hotel, and then the Hôtel de Londres, all on the same side of the way. Nearly opposite the Villa Luigia Ponente is the road which leads to the Cemetery, and further on, in front of the Hôtel de Londres, is the Pension Joly and the Hôtel Palmieri; after the Hôtel de Londres, on the same side of the way, are several villas, very pleasantly situated, but some rather high up; next come the Hôtel Paradis, the Hôtel Belle Vue, and the Royal Hotel. These occupy excellent positions, and the same remark applies to nearly all the others. The last-named hotels are succeeded by a number of villas, some near the road, others higher up, at different elevations, and amongst these may be mentioned the Pension Tatlock. Next to the Villas Bracco, and close to the town, is the

Giardino Pubblico, or Public Garden, which occupies a very sheltered position facing the south. Although not of any very great extent, it yet forms a very favourite walk and lounge for the visitor and invalid; the grounds contain many handsome trees and shrubs, including the Eucalyptus, Pepper, Lemon, Orange, Camphor, Palm, and some Banana trees which, in favourable years, are said to bear fruit. Many of the trees and shrubs are labelled with the class, name, and habitat, and this is an excellent plan. It is here that the band chiefly plays in winter.

Returning to the Hôtel de Londres, and nearly opposite to it, high above the sea and the railway, is the new Public Garden, Jardin de l'Impératrice; beside this is a broad and handsome footway which descends past the railway station, terminates at the Hôtel de la Paix, and is bordered by flowering shrubs, as well as by many Eucalyptus, Pepper, and Palm trees; this walk is well exposed to the sun and sea breezes, is provided with seats, and forms a very pleasant and favourite Promenade. The Hôtel de la Paix is nearly opposite to the entrance of the old public garden, next to which, but standing back a little from the road, is the Church of the Capucins, close to the commencement of the Via Vittore Emanuele. This completes the general description of the western suburb; that of the eastern will now follow, commencing from the Piazza Colombo: on the right is the French Chapel and Educational Convent for young ladies; after this we come to the Corso Garibaldi, with some fine Plane trees on either side; on the left is the Church of the Angels, and next, the Ospedale Civico, or Civil Hospital. The Corso Garibaldi extends some distance beyond the Hospital, and ends in what is called the Rondo. In the Corso are the Hôtels de Nice and d'Angleterre, as well as, on either side, numerous villas, mostly on a level with the road. From the Rondo, on the left, is a road which leads to some houses and to the Pension d'Allemagne. Beyond the Rondo is the continuation of the Genoa road, on either side of which are some fine and well-situated villas, as well as the Hôtels Mediterranée and Victoria on the right

hand side, with, on the left, the Pension Rose. The San Martino torrent forms the eastern postal boundary of the town; and the Foce torrent, just beyond the West End Hotel, the western boundary.

In addition to those already noticed, San Remo contains many other churches, sanctuaries, and oratories, for notices of which the reader is referred to the 'Guide to San Remo' by Cesare da Prato.

It may now be observed that the hotels and villas on the western side of the town stand for the most part on higher ground than those on the eastern side, and are nearer to the sea, consequently they are more exposed to the wind and sea breezes and the air is cooler and fresher. On the other hand many of the hotels and villas on the east side, are on a lower level, further from the sea, and the land seaward is covered with sheltering olive trees; hence this side is less exposed to the wind, the noise of the sea is less heard, and the air is warmer and moister. I shall hereafter consider more fully these differences, particularly in their medical bearings.

The description of San Remo would hardly be complete without a reference to the railway. The station is a very shabby wooden structure not at all befitting a town of the size and importance of San Remo, but it is in contemplation to erect a more complete and permanent building. On the western side of the town the railway unfortunately runs close to the sea; and, although this is not so much the case on the eastern side, the inhabitants are cut off from access to the shore almost to an equal extent. This is a serious hindrance to the welfare of the town, as it not only prevents the shore from being readily accessible, but it renders the construction of a promenade on a level with the sea at the western side of the town all but impossible, although at the eastern end there is still space left for the formation of that essential improvement, a commodious esplanade.

The description of the town of San Remo may be brought to a conclusion by a few remarks relative to the Port and Cemetery.

On reaching the Port from the Via Gioberti, on the right a somewhat dilapidated fort is seen, 'Santa Thekla,' built by the Genoese and now used as a prison. From the back of this a raised terrace or pier runs out towards the sea, and forms the western boundary of the port. This terrace is called the Mola and is reached by several flights of steps, and from its extremity, as already noticed, a very fine view of the amphitheatre of hills and mountains surrounding the town, is obtained, as well as of the whole town itself standing out boldly on the side of the hill. On the left of the fort are the Sea Baths; these face the entrance of the port and here may usually be observed a vast quantity of the sea-weed, peculiar to this part of the Mediterranean, cast up on the shore, where it forms in the immediate vicinity of the baths, and for some distance beyond them, a very considerable bank, the water itself being rendered turbid and discoloured by the quantity of sea-weed floating in it, and which imparts to it anything but an inviting appearance. The site chosen for the baths is therefore not a good or suitable one, but there is the further objection to be urged against the position, that the water of the harbour is not nearly so pure and fresh as that of the open sea. It is then very desirable that the present baths should be removed to a cleaner site on the sea-shore.

The seaweed which has accumulated in such large quantities at these baths and elsewhere along the coast contains nitrogen and other fertilising constituents in quantity sufficient to render it valuable; and it is a pity it is not used here, as it is in many other places, as a manure. The fresher the fucus the larger the proportion of albuminous matter present.

At a little distance from the baths, and at the south side of the port, a few small sailing vessels are usually to be seen. Formerly, before the days of the railway, small coasting steamers regularly put into this harbour from Genoa, Nice, and Marseilles, but they have long since ceased to do so. At no time however could the larger steamers call here, in consequence of the shallowness of the

harbour. If this could be deepened so as to allow of steamers putting in to the port, bringing luggage, goods, and general merchandise, the prosperity and wealth of the town would be thereby greatly increased. At present, goods coming from England by ship have to be landed either at Marseilles or Genoa, and to be transmitted thence by railway at a greatly increased cost and with vexatious Custom-house delays.

The port is well worth a visit for the sake of the view to be obtained of the surrounding hills and mountains, but for no other reason is it so. The ground around the port has a desolate and neglected appearance, is nearly without trees or verdure, seats, or anything to render the spot pleasant and attractive. With a little care and outlay all this might be altered, and the port made one of the bright and agreeable features of the town, to which both visitors and townspeople would be glad to repair, to enjoy in ease and comfort the beautiful prospect thence obtained.

The cemetery, or 'Campo Santo,' as already stated, is situated on the west side of the town, nearly opposite the Hôtel des Anglais. There is from it a fine view of the mountains, but none of the sea. It consists of a chapel in a square piece of ground, enclosed in high walls, inside which is a covered way with supporting pillars, and under this are many of the principal vaults, monuments, and tombstones, mostly in marble; thus situated, they, as well as the flowers and decorations, are well protected from the weather. The central portion of the cemetery is planted with rows of Cypress trees. At the head of many of the tombstones, photographs of the deceased are placed—a curious custom, but which has much to recommend it.

When I first visited the cemetery at the end of November, many of the graves were decorated with fresh flowers, one especially attracting attention. Upon this lay a beautiful cross about eight feet long, formed mainly of hundreds of freshly-gathered 'Gloire de Dijon' roses intermixed with other kinds of roses, all of which blossom in the open air in great profusion throughout the

winter. The portion of the cemetery set apart for those who are not Roman Catholics, is far too small; in this are many graves of Germans and English, the number of the former predominating; indeed, the English who are buried here are but few.

On All Saints' day, in France the *jour des Morts*, a procession is formed to the cemetery, accompanied by great numbers of the townspeople, especially those who have relatives or friends buried there. A service 'in memoriam takes place, and the people deposit in great profusion wreaths, immortelles, and flowers on the graves; they also sometimes suspend on the head-stones small coloured lamps.

Having brought the description of San Remo to a conclusion, the sanitary condition of the town may next be considered, and especially the Water Supply and Drainage.

On the importance of a pure water-supply it is unnecessary to insist. To be satisfactory, it should fulfil the following conditions: the water should be pure, abundant, easily accessible to the inhabitants, and should not be liable to contamination, as by the proximity of drains and cesspits. San Remo itself is supplied by about eight fountains, situated in different parts of the town. The water supplying five of these is obtained from Lago Negro, below San Romolo and near San Michele; it is conveyed to the town by an aqueduct, which runs beside the San Romolo road at an elevation which renders its subsequent distribution a very simple and easy proceeding. For this supply the town is indebted to the late Dr. Andrea Carli, who, according to Dr. Onetti, 'always occupied with the welfare of those under his administration, and they having had only the impure and muddy water of wells or cisterns to drink, a source of endemic maladies, typhoid fevers, gastro-enteric disorders, and of verminous affections, procured for his native place in 1828 wholesome and potable water, distributed by five handsome fountains erected in as many spacious public squares.'

I have had the water of the fountain in the market-

place, which is supplied from Lago Negro, analysed by Mr. Otto Hehner, F.C.S., with the following results:—

	In 100,000 parts
Chlorine	1·35
Sulphuric acid	0·728
Nitric acid	0·124
Free ammonia	0·0008
Albuminoid ammonia	0·0067
Total solids	24·0
Hardness	20·0

The above figures prove that this water is of considerable purity, as was to be anticipated from the source from which it is derived, and of a moderate degree of hardness. The first and most important condition of a good water supply, namely, purity, so far as the fountains supplied from Lago Negro are concerned, is therefore fulfilled.

Now I have noticed that these fountains are always running; the supply hence is constant and abundant, and thus the second condition, so far as relates to them, is also complied with.

The water, however, is not laid on to the houses, but the people have to obtain it from one or other of the fountains, and at the cost of time and great labour have to convey it, sometimes up steep streets and staircases to their dwellings, storing the water thus obtained too often in any pails, pans, or utensils which may be procurable, whereby it frequently becomes more or less contaminated. Having regard to existing circumstances, it might possibly be somewhat unreasonable to expect, as in more modern towns, that a supply of water should be laid on to each house; but it would be a great boon to the inhabitants if the number of fountains could be increased, and the labour of obtaining the water be thus proportionately lessened.

But the remarks just made have reference only to the supply of the town from these fountains. The houses, villas, pensions, and hotels obtain their supply from wells, one well in some cases being common to two or more houses Now the quality of the water in these cases may be expected to vary a good deal, according to the situation and

depth of the well. With a view to test this, I made a selection of the water of three wells; 1, from near the Villas Carli, and consequently not far removed from the sea; 2, high up on the west side; and 3, from near the Skating Rink, low down at the east end of the town.

These were also subjected to analysis by Mr. Hehner, with the subjoined results:—

	In 100,000 parts		
	1	2	3
Chlorine . . .	24·30	7·42	21·12
Sulphuric acid . .	14·283	3·667	5·398
Nitric acid . . .	12·690	0·137	2·498
Free ammonia . .	0·0045	0·0106	0·0158
Albuminoid ammonia	0·0056	0 0032	0·0046
Total solids . .	146·6	63·1	103·8
Hardness .	63·6	37·2	38·0

The above results prove that the water No. 1 is so impure that it cannot be used with safety: it contains large quantities of chlorine, sulphuric and nitric acids, and it is exceedingly hard; it is unsuited alike for drinking, cooking, and washing. Several houses are supplied from this well, the use of which in its present state should be prohibited. No. 2, although very far from being so bad as No. 1, is by no means a good water, and it is much harder than is desirable for all the purposes of domestic use. No. 3 must be pronounced a very bad water, much worse than No. 2, but not so impure as No. 1. The use of this water should also be discontinued.

Thus, of the four waters submitted to analysis, one only is of the requisite purity, and this is not as soft as could be wished. Even if the three waters to which exception has been taken had been above the suspicion of contamination, they are yet much too hard, their hardness rendering them objectionable for drinking, cooking, and washing: for drinking, because, being less readily absorbed, they impede digestion; for cooking, since they are less efficient solvents and extractors; lastly, they are unsuitable for washing because they are less cleansing and very wasteful of soap. When used for drinking, hard waters should be previously softened by boiling, and then passed through a filter in

order to remove the large quantity of lime which becomes thrown down.

From the fact that good water is to be obtained from the heads of some of the valleys which intersect the surrounding hills, its supply to all the houses would, so far as the engineering is concerned, be a comparatively simple affair; such a scheme would, however, cost money, but then there would be the water-rates to meet the interest of the outlay, and as a rule there are few more remunerative investments than those in water companies. The present system of supply is a very costly one to householders, by reason of the labour involved, which frequently necessitates the payment of people specially engaged to bring from the well the water daily required. The outlay which has thus to be incurred is in most cases far greater than that which would be charged by any water company, and it constitutes a really serious tax.

The rain which falls on the roofs of the houses in the old town is discharged at once into the streets by means of overhanging spouts; anyone, therefore, passing through them, stands an excellent chance of being well drenched by the descending columns of water and by the splashings. Now, considering the scarcity of water and the labour with which it is obtained, it might be supposed that the people would be careful to collect as much of the rain-water falling from these spouts as possible; so far, however, is this from being the case, that I have never on any occasion seen a tub or vessel of any description put out to catch this soft and valuable rain-water.

Next in importance to the water supply of a town is the drainage and other means for the removal of the daily refuse.

In our visits to the old town we have been agreeably surprised at the general cleanliness of the streets, and comparative freedom from bad smells; the same remark applies to the principal streets of the newer portions of the town.

In passing through the old town, numerous gratings are observed which communicate with drains intended

only for the reception of the rainfall and the liquid refuse of the houses, although solid matters often find their way into them.

In the chief streets of the lower town, similar gratings and drains exist, the latter terminating usually in the sea. These drains, like those of the upper town, are not for solid sewage; notwithstanding which, however, in the course of time a considerable precipitation and accumulation of organic matter takes place in them, giving rise in certain localities, from the decomposition which ensues, especially in hot weather, to offensive and noxious emanations.

It does not appear that any means exist for flushing the drains, nor—judging by the fact that bad smells may sometimes be observed coming from the same grating for a long time together—that steps are very frequently taken to remove accumulations and obstructions. The heavy rains of the autumn and spring do much to cleanse and purify the drains and so to lessen the smells, which it is to be feared in the summer must be greatly intensified, not only from the diminished rainfall, but from the greater rapidity of decomposition at that season of the year. It is very desirable that the drains should be freely ventilated, and an outlet afforded for noxious gases, by means of 'safety' pipes in suitable situations, carried up the sides of houses.

It is stated that there are few or no cesspits in the old town, so that the solid house refuse has to be got rid of by other means: what these are will presently appear. For the various hotels, pensions, and villas, there is no regular system of drainage at present, but only cesspits. Care should be taken that these are emptied at proper intervals and periods of the year, and that the wells should not be in such a situation as to allow the possibility of the contamination of the water through the intervening soil. With a view to obviate this danger the cesspit should be cemented, and placed considerably below the well, and it should also be provided with a ventilating tube or shaft.

The general cleansing of the town, and the collection of such of the refuse as is thrown into the streets, is performed by women. They daily sweep up this refuse, which is afterwards removed and employed as manure, chiefly for the Olive trees, for which it is much prized. In very few cases is the house refuse collected in baskets, or other convenient receptacles, and placed in the street with a view to its removal; and strange to say, no public provision whatever appears to have been made for the removal of house refuse generally, and particularly of that from the private houses and villas. Each occupant does as he thinks fit with this, and gets rid of it the best way he can, usually by throwing it into the nearest torrent, or taking it down to the shore and casting it into the sea, thus giving rise to unsightly spectacles, unsavoury smells, and also wasting a very large quantity of valuable fertilising material.

One would have supposed that this would be eagerly sought after, and that its value would more than pay the cost of its collection. There ought to be, as there is in so many other towns, a regulation rendering it imperative on the inhabitants to put their house refuse in some suitable receptacle in an accessible place, with a view to its daily removal early in the morning. In this way many tons of good manure would be obtained each week, and the town, torrents and sea-shore kept clean and sweet. Not only is the refuse disposed of too frequently in the manner above described, but even in more objectionable ways, as by casting it over walls and throwing it in all sorts of bye-places and corners, where it becomes obnoxious alike to sight and smell.

Thus, while the main streets of San Remo are kept clean, and are tolerably free from smells, the same cannot be said of the less frequented streets and outlying places, including the neighbourhood of the port, the arches under the railway, and many other localities, where one is often confronted with accumulations of nastiness which would not be permitted for a day in even the poorest English village. This condition of things is the more to be

regretted, since it might easily be remedied, and at a very small cost.

A few remarks may now be made respecting the inhabitants of San Remo.

The San Remese possess the good looks so characteristic of Italians, the regular features, large dark eyes, thick luxuriant black hair, and the expression in a marked degree of high intelligence. Their complexions are for the most part bad, being generally dark, swarthy, and sallow, the sallowness denoting the lymphatic temperament, and being due in some cases to ill-ventilated and dark habitations as in the old town, and to the poorness of the food. The effect of these influences is particularly observable in children and young people.

The men, though well-grown for the most part, want that robustness of form and development of muscle which denote strength, and which is so characteristic of the hardier northern race. The women, while young, are bright-looking and comely, but they soon lose their youthful looks, and at an early age become faded and wrinkled. This premature change is partly to be explained by the nature of the occupations which fall to the lot of very many of the women of the working classes in this part of Italy. Unlike what prevails in most other countries, here the women do the rougher, heavier, and the most repulsive part of the work; thus, they assist in building the houses, ascending even to the roofs, and carrying on their heads loads of mortar, bricks, and stones. They are frequently seen carrying baskets of sand and shingle up from the sea-shore, and in this laborious occupation even girls of tender age are employed at a period when all their powers are required for the development and strengthening of their frames. The women sweep up the streets, and carry on their heads to the Olive plantations the baskets of evil-smelling refuse thus collected; in the same manner they carry heavy casks of wine (*fig. 5*), tubs of water, sacks of flour (fig. 6), sofas and wardrobes. If a piano be hired it is sent home on the heads of three or four women, a man frequently walking

beside them like a corporal in charge of his file; indeed, the men as a rule think it derogatory to their dignity to carry such burdens. One cannot but feel for the women on meeting them thus heavily weighted, really more like beasts of burden than human beings. Sometimes, however,

FIG. 5.

and at certain seasons, the loads which they bear on their heads, as baskets of olives, which they bring down daily from the groves to the olive mills to be crushed, or oranges and lemons, are of a pleasanter and more suitable character.

The dexterity which the women display in carrying

heavy loads, balancing them on their heads, is really remarkable, and is no doubt explained by their early training, since they commence as mere children. I have seen women carrying large shallow tubs of water up the steep streets of the old town, without once touching the tubs with their hands or spilling a drop of the water.

These occupations, so far from giving the women grace and freedom of carriage, as some writers have imagined, cause them to lose their complexion and youthful appearance, and render their figures coarse and unshapely.

But the most curious part of the matter is that the women themselves see no hardship or impropriety in all this, but prefer labour so unsuited to their strength and sex to domestic service. So much is this the case, that it is very difficult to obtain an unmarried woman-servant, and if one be secured she is nearly sure to be ignorant of the duties required of her, added to which, as a rule, she can neither read nor write. It is only recently that married women have become willing to go into service, but the high rate of wages now given, and their own poverty, have to some extent overcome the disinclination.

In consequence of the inefficiency and small choice of Italian servants, the visitors to San Remo, both English and German, either bring with them their own or engage Swiss, French, or German servants, who, while they are more efficient, are also obtained at much lower wages. An Italian woman-servant, however incapable, expects to be paid at the rate of from 50 to 60 francs a month.

The necessity for engaging foreign servants is very much to be regretted, as the San Remese women thus lose much money every season. It is most desirable that the Italian ladies should set on foot an institution for the training of young women in the duties of domestic service.

The conveyance of heavy goods from village to village is mostly effected on the backs of donkeys; this arises from the steepness of many of the mountain ascents and the absence of roads. The burdens laid on these patient and most useful animals are not a little varied and curious; now casks of wine, one slung on either side (fig.

7), now panniers, filled with sand and stone, or faggots of firewood; bundles of bamboos trailing many feet behind the donkey, and presenting a most singular appearance, or brushwood intended for the oven, consisting mainly of Fir, Juniper, Lentiscus, and Myrtle.

The way in which the washing is performed at San Remo differs but little from that practised in most parts

FIG. 6.

of Italy, France, and Germany. Wherever there is water, no matter how scanty or dirty it may be, there you are sure to see washing going on. It is in the shallow streams in the neighbourhood of San Remo that most of the washing is carried on, and the water of these is more

or less polluted by the filth and refuse of all descriptions constantly thrown into them. The clothes are brought down to these streams in baskets, several women washing near together; each selects a suitable stone, and on this she rubs and soaps the clothes. There is little rubbing between the hands, and seldom any use of hot water as with us, and much of the soap is of course wasted in the stream without its having exerted any action at all in cleansing the clothes. The consequence is that the linen is very imperfectly washed, and is much injured by the rough usage to which it is subjected.

Although the Italian and French washerwomen do not make use of large quantities of soda, like the English, with a view to soften the water and so to save soap, they sometimes have recourse to a proceeding of very similar character, and which produces a like effect.

As the fires in the South of France and in Italy are all of wood, a large quantity of a greyish-white ash is produced; this, of course, contains much alkali, as the washerwomen have found out by experience, and hence it is a common practice to sprinkle wood ashes over the clothes after they have been steeped.

After having been washed in the rude and primitive manner described, instead of the clothes being hung on lines supported by props as in England, the clothes are spread out on the ground, on stones, walls, or palings, and in fact anywhere where space is to be found, quite regardless of appearances. This proceeding does not make the clothes any cleaner. In the poorer quarters of Italian towns the houses are perfectly disfigured by the display of somewhat unsightly garments hung out to dry. The practice of hanging the clothes in every available place is a real disfigurement to the town, and it is a pity that no proper drying grounds have been provided.

Not only are the clothes frequently brought home still retaining much dirt, but, with the exception of a few articles, they are returned unironed and unmangled; in fact, except in some of the hotels, no such thing as a mangle is in use in San Remo or the neighbourhood.

But the great objection to the practice of washing clothes in the manner described, is the liability to their becoming infected, either by the sewage thrown into the

FIG. 7.

streams, or by infectious matter contained in contaminated garments.

It would be a great boon if the authorities were to erect two or three large public washing places in suitable

situations, protected from the weather, and provided with a good supply of pure soft water. For the use of these a small charge might be made, which would be covered many times over by the saving of soap alone, to say nothing of the saving of labour and avoidance of illness. It is very certain that washing as the poor women do now, exposed to all weathers, and kneeling in cramped positions in damp places or on the hard stones, they must often suffer greatly in health.

At the north-east corner of the market there is already one such washing-place, the 'Lavatoio Pubblico,' on a very small scale, but this is wholly inadequate to the requirements of so populous a town.

On Sundays, holidays, and during the long evenings of spring and summer, the San Remese are very fond of walking in the Corso Garibaldi and on the Promenade de l'Impératrice, assembling often in considerable numbers. It is very interesting to observe them when thus gathered together. The appearance and dress of the women is peculiar; they are usually without bonnets, caps, or other covering to their heads than their abundant black hair, and each wears a gaily coloured handkerchief folded like a shawl and crossed over the chest; but if the weather be very cold they sometimes tie a handkerchief over their heads as well.

The characteristic and graceful black lace veil is occasionally seen, but the wearing of bonnets or hats is confined entirely to the upper classes. The men wrap themselves up much more carefully than the women, and they are commonly seen wearing grey woollen shawls exactly like those usually worn by women; others wear cloaks of ample dimensions, with one side thrown over the shoulder as in Spain. Whatever the style of dress adopted, the men are all very warmly clad, and even in weather by no means cold, most of them carry a shawl or other wrap over the arm, to be put on at sunset or in the event of any sudden change of temperature. Further, many of the men of the peasant class carry large umbrellas of the brightest colours. Mingled with the crowd are many

priests and a few Capuchin monks, who by their dress give character and picturesqueness to the scene. Until recently San Remo contained, besides its numerous churches, several conventual establishments; most of the latter no longer exist, but a great many priests and ecclesiastics still find occupation and have their homes in San Remo.

The opportunities for exercise in and around San Remo are considerable. The inducements for walking exercise, which may be taken almost daily in the winter, are very great, owing to the beauty of the country and the variety of walks and excursions in the neighbourhood, as, going westward, to Capo Nero, Ospedaletti, and Bordighera, and eastward, to Poggio, Capo Verde, and Taggia; also up the several valleys, and over the hills and mountains. For those who are not strong, there are many walks near the town in the Olive groves, some of which are within the reach of invalids, while for the longer and more distant excursions there are plenty of donkeys to be hired at a very reasonable rate, but the principal excursions in the neighbourhood of San Remo will be found described elsewhere.

The number of drives is unfortunately but too limited, as is the case with most of the towns on the Riviera, owing mainly to their lying more or less under steep mountains. The principal drives are, westward along the far-famed Corniche road to Bordighera, to Dolceacqua up the valley of the Nervia, Ventimiglia, Mentone, and Monaco; and eastward, to Poggio, Capo Verde, and Ceriana, to Taggia, Riva, San Stephano, Porto Maurizio, and Oneglia. A carriage road is in course of construction, which, starting from the Genoa road a little to the west of Capo Nero, leads to the top of the cape and to Colla, the views from near which are as beautiful as those on the east from the Madonna della Guardia on Capo Verde. Two other roads are also being made, one on the east, and the other on the west side of the old town, which will render available a number of beautiful sites for the erection of houses and villas now urgently required.

Although the whole of the places above named are

within the compass of a drive, yet the distant ones may be still more quickly reached by railway; indeed very pleasant excursions may be made to any of the places on the railway as far as and even beyond Nice, returning to San Remo the same day.

The pleasure derived from the walks may be greatly enhanced if there be added the pursuit of some branch of natural science, as geology, botany, and entomology, and for which rich and rare materials everywhere abound.

Then, from the little harbour, in suitable weather, boats may be taken for a row along the ever beautiful shore of the Mediterranean; the most complete view of San Remo, as already stated, being obtained at a little distance from the town.

For fishing there are but few facilities at San Remo, but the lovers of the piscatorial art will find more scope for the indulgence of this pursuit at Bordighera, which may be reached by train in twenty minutes.

In the early spring bathing may be freely indulged in by those in health, and without the risk of accident.

Among the amusements the Theatre may be mentioned, with its operatic representations, as well as the excellent town band which plays in the old Public Garden several times a week throughout the winter.

Then there is the Circolo Internazionale, which corresponds somewhat to an English club, with its reading, billiard, and reception rooms; here concerts take place, and balls are occasionally given during the season.

There are several libraries, one at the English Vice-Consulate, and those of Gandolfo and Berio.

In the season there are a few parties and private gatherings, although here, as at most resorts for invalids, the chief social meetings take place in the afternoon. In the spring many picnics are organised, and these are really very enjoyable, the most beautiful spots of the surrounding country then being visited.

If the list of amusements at San Remo be not long or striking, it must be remembered that this place is chiefly a

health resort, and that the pursuit of health and pleasure cannot often be successfully combined. Still, there are few towns of the size of San Remo which possess so excellent a band and so well appointed a Theatre, or rather, Opera-house, since it is devoted almost entirely to the performance of operas.

Amongst the amusements at San Remo during the winter season, the Carnival must not be forgotten; this lasts three days, and, having regard to the size of the town, it is carried on with much spirit. To those who have never witnessed such a spectacle it presents much to interest and amuse. The weather during the Carnival of 1879 was unfortunately very wet, and the programme could only be gone through in part; the permission of the authorities, however, was obtained, strange to say, to celebrate the last day on the following Sunday.

CHAPTER II.

Food Supplies at San Remo—Mediterranean Fish—Sale of Small Birds—Vegetables—Fungi—Fruit—Many articles partaken of in France and Italy, not used as Food in England—Indiscriminate Slaughter of Small Birds.

A FEW years since, before San Remo became an important health resort, and when the town was inhabited almost entirely by the native population, whose mode of living is so much simpler than our own, the food supplies were indifferent in quality and presented but little variety, the surrounding mountains and valleys not yielding very much in the way of food, beyond mutton, poultry, olive oil, fruit, and vegetables. Now, however, since the arrival of so many strangers, especially English, the supplies have gradually increased in quantity and variety, and the cost of living also in nearly an equal ratio.

The oxen which furnish the beef are brought mainly from Piedmont, and instead of being driven here as formerly, the condition of the cattle being thereby greatly impaired, they now arrive for the most part by rail, Mentone, Nice, and Cannes being supplied from the same source. The quality of the meat furnished by these oxen is excellent, but much of the beef sold in San Remo is inferior. The sheep come from the surrounding mountains, and there being, especially in the winter, but little pasturage, they are thin and the mutton by no means equal to that we are accustomed to in England. The lamb is eaten far too young, some of the lambs being but little larger than hares. The veal is good, but not nearly so white as in England, it sometimes being more like beef in colour.

The supply of Poultry is abundant, and includes not only fowls, but turkeys, guinea fowls, ducks and geese; the quality is for the most part good, and the prices moderate. There is also usually plenty of game, especially hares, partridges, including both the red and grey legged, wildfowl, woodcock and snipe, but pheasants are rather scarce and are seen in the market chiefly at Christmas.

Flour and bread are both good, but rather dear. The native population usually make their own bread. Most of the Butter sold is particularly good; it usually comes from Milan. The Milk is also good and abundant. As there is no pasturage in or near San Remo, especially in the summer, the cows are kept up in the mountains until the commencement of the winter, when they are brought down and are then stall-fed.

With respect to Fish, the supply is more limited. The fish of the Northern seas is now, however, brought regularly to Nice, and from thence is distributed to the different health resorts of the Riviera. The fish of course arrives packed in ice, and hence its quality and flavour are somewhat impaired.

The quantity of fish caught in the Mediterranean is by no means considerable; they are usually small, and but few are of really good quality. Several reasons are assigned for the paucity of fish in the Mediterranean; one of these is its exceptional warmth. It is a curious fact that all the more valuable kinds of fish are found in the greatest abundance in the colder seas, as those of North America and the North of Europe; it is from the latter that the shoals of fish caught on our English shores annually migrate. The fish of tropical climates are neither abundant nor very good Other reasons are the great depth of the water, reaching to nearly 10,000 feet in some parts, and the absence of shoals. In deep water there is a comparative scarcity of animal life, and a consequent diminution in the amount of food available for the nourishment of fish, while the absence of shoals operates by rendering the deposition of the spawn and breeding of the fish more difficult.

But there is still another very singular reason assigned

by Dr. Carpenter for the comparative absence of fish in the Mediterranean, and that is, the small amount of oxygen contained in the water of that sea as compared with the Atlantic; it being only 5 per cent. in the former and as much as 20 per cent. in the latter: now, oxygen is the great supporter of respiration and of animal life. This deficiency is attributed by Dr. Carpenter to the oxygen combining with the organic matter contained in large amounts in the small rivers and torrents which discharge themselves into the Mediterranean. At the same time that there is a diminution in the oxygen, there is an increase in the carbonic acid.

At San Remo there is little fishing, much of the fish consumed being obtained from Bordighera, but fishing is also carried on to some extent at Mentone, Cannes, and most other towns on the coast. The method usually pursued is as follows. Owing to the depth of the water trawling is, of course, out of the question: in lieu of the trawl, exceedingly long straight nets of some 6 or 7 feet in depth, properly weighted, are employed; these are thrown into the sea at a short distance from the shore, the two ends are dragged along by men in boats, and gradually approximated; thus any fish which may be contained in the space enclosed by the net are captured. The operation of casting the net and hauling it on to the shore is one which occupies a good deal of time and is attended with some excitement on the part of those, usually some ten or a dozen men and boys, engaged in it, and much interest and curiosity are evinced by the bystanders. After much shouting and hauling at the long ropes attached to it, the net with its contents is landed on the shore, and everyone rushes forward, including the fishermen themselves, to inspect the capture. After so much time and labour expended, and so many persons being employed, one naturally expects some adequate result, but, as a rule, not more than two or three dozen small and insignificant looking fish are obtained, scarcely enough to fill even a very small basket, and one wonders how such captures can possibly pay the number of persons engaged.

Although the Mediterranean does not yield any great abundance of fish, yet there are many kinds partaken of, and a few of these, though small, are really excellent. Thus the sardine, Clupea pilchardus, is both abundant and cheap, and when properly fried in good olive oil it is exceedingly nice and to be regarded in fact as a delicacy. Sardines are sometimes sold about the size of white-bait, and these are quite equal to their renowned English namesake. Not unfrequently large baskets filled with a gelatinous-looking substance are seen in the market; this, when closely examined, is found to consist of the fry of a fish which Dr. Günther believes to be the sardine; so small is it that it is necessary to cook it in batter. It is a thousand pities that this wholesale destruction of the fry of so commercially important a fish as the sardine, especially on the shores of the Mediterranean, is not strictly prohibited. Other kinds of fish which are really very good, are a species of mullet called Rougie, Mullus barbatus; a broad flat fish distinguished by its pinky hue, Pagellus erythrinus; another, characterised by four yellow stripes or lines running along the body, known as the Dorade, is Mæna vulgaris; there are also the Amande, Box salpa and the Loup. But a great variety of other fish are partaken of, although not equal in quality to those already mentioned, as Serranus scriba, S. cabrilla, species of perch; Sargus annularis and S. vulgaris; Cantharus lineatus; Heliastus chromis; Crenilabrus rostratus; Scomber pneumatophorus, a species of mackerel; Cepola rubescens, a ribbon-like fish; and lastly, the beautiful and many-coloured Coris julis, characterised by a broad vermilion stripe down each side. For the scientific names of these fish I am indebted to the kindness of Dr. Günther, of the British Museum.

These fish, and especially the sardine, should be partaken of with a plentiful sprinkling of the juice of a freshly gathered lemon; they are all greatly improved by this addition, which is far more pleasant and wholesome than the hot and pungent sauces so generally used in England.

Occasionally, in the spring of the year, the fish of the

Northern seas are caught in the Mediterranean, having been carried into it by the Gulf stream through the Straits of Gibraltar. In the season, salmon and trout are found in the shops of San Remo. If an early visit be paid to the market a variety of curious Mediterranean fish, in addition to those already mentioned, are often seen, as well as Cuttlefish, which are caught in large quantities all along the Riviera. Their mode of capture is peculiar. The boat is gently rowed over the rocks near the shore, the fisherman being armed with a long stick baited at the end; this he puts down amongst the rocks wherever he thinks the fish would be concealed; these clutch at the bait thus presented to them, and, tenaciously adhering to it, are readily drawn to the surface of the water. There are at least two species of cuttlefish caught in this manner, and they are extensively partaken of as articles of food.

Not unfrequently baskets of Snails are seen here, as in France, but they are of a smaller size.

Thrushes, Blackbirds, Starlings, Larks, Goldfinches, Chaffinches, and even Robins, in fact all the smaller members of the feathered tribe are generally to be met with in the market in large numbers, no matter how rare the bird, how beautiful its plumage, or how sweet its song.

The Vegetables in the market include all the usual kinds, according to the season, as well as one or two which are not so generally met with, as Salsafy, the leaves and roots of Chicory, and Cardon. Salsafy, Tragopogon porrifolius, belongs to the same natural order as Chicory, the roots when cooked, are soft and tender, but possess little flavour. The leaves of Chicory, Cichorium intybus, are either used alone as salad or mixed with lettuce or some other suitable vegetable; and the roots are boiled like those of Salsafy, and served with sauce; but, notwithstanding the boiling, the roots are somewhat bitter and woody. Neither of these vegetables can be compared for a moment, either in texture or flavour, with carrots or parsnips.

Cardon consists of the stems and leaves of a species of thistle or artichoke, Cynara cardunculus, grown so as to

bleach the leaves in the same manner as celery, to which the heads of cardon in form and appearance bear a striking resemblance. When cooked like celery it furnishes a very palatable dish, the leaves being tender and the root having somewhat the flavour of the artichoke.

In the autumn and early winter large baskets of Fungi are exposed for sale and appear to be in much demand; there are several species partaken of, all differing from the mushroom commonly consumed in England. One kind is of a salmon colour, and is named Lactarius deliciosus; another, with a black epidermis to the shield, is Boletus edulis, and this is the one most frequently met with in the market, being sometimes sold in the dried state; a third, characterised by the vermilion colour of the epidermis, is Agaricus Cesareus; a fourth, Agaricus albellus, is much esteemed on account of its perfume; but the only kind which appears in the winter is Agaricus campestris L., commonly called Boleto d'Ulivo.

Tomatoes are particularly abundant and cheap; they are full of flavour, and constitute a most agreeable addition to many dishes; they should be partaken of freely, like other vegetables, and not used merely for flavouring. So abundant are tomatoes here that large quantities are made into a 'conserve de pommes d'amour;' this consists of the pulp of the tomato deprived of its seeds, with salt, pepper, and other flavouring added. In this state it keeps for a considerable time, and acquires a dark, ferruginous, red colour which gives it a very singular appearance. Tubs and pans filled with this conserve are to be seen very frequently in the early part of the winter, it being evidently in much demand by the San Remese. Tomatoes also make an excellent jam when boiled with sugar and very slightly flavoured with lemon juice. French beans are to be had in the market up to Christmas, and peas make their appearance about March. In November and December large baskets of beans, resembling scarlet runners, are always to be seen; these look old, and the seeds contained in them are of considerable size, but when cooked they are found to be quite tender and of good flavour; they are known in

the market by the appropriate name of 'mange-tout,' and they are certainly very much more nutritious than young French beans.

The Fruits to be had in November include Grapes of different kinds, one a large, oblong purple kind called Croairora, which is really very fine, as well as abundant and cheap; Lemons, not yet very ripe, and a few Oranges. As the winter progresses the number of baskets of oranges and lemons increase, as also does the ripeness and beauty of these fruits, so that during most of the winter they form one of the most conspicuous and charming objects in the market. It is not a little curious that such brightly tinted fruits as the lemon and orange should only begin to ripen and acquire their characteristic colours at the commencement of the winter, and that this process of ripening should be continued throughout that season and not completed until its termination; even sunshine does not appear to be necessary to the ripening, as during a period of continuous rain the fruit may be seen to increase daily in depth of colour. The best oranges in the neighbourhood come from Taggia, whence also we have the earliest green peas. Figs are very plentiful, and of at least three kinds, all luscious and of delicate flavour, very different from the half ripe, insipid figs usually met with in England. One kind is of a rich purple colour, another a pale green, curiously starred at the top, showing the rich purple contents; the third kind is also of a pale green colour, and is distinguished by not being starred, and although, of the three varieties alluded to, it is the least attractive in appearance, its flavour is yet superior to the others. Then again, Pomegranates, so cooling, refreshing, and tonic from the quantity of gallic acid contained in them, are now to be had in abundance.

The Apples in the market are noticeable for their very large size and beautiful appearance. Very fine Medlars are plentiful.

The fruit of the Japanese Medlar is seen in the shops at Genoa in great quantities during the month of April, doubtless imported from some warmer climate, for this

tree only ripens its fruit in the Riviera at a much later period; it does not undergo the decay of the ordinary medlar, but the fruit, which possesses a cooling and pleasant taste, is partaken of either in its natural state or preserved in sugar.

The fruit of the Service-tree called here Sorbe, Pyrus torminalis, is occasionally met with; it has the size, form, and colour, when not too ripe, of a very small pear, but when fully ripe it changes like the medlar to a deep brown, in which state it is usually eaten; its flavour is particularly pleasant and delicate, and the Sorbe would no doubt be much liked by all who are fond of medlars, to which in some respects it is to be preferred.

Unfortunately, the time soon arrives when most of these fruits are no longer obtainable. Other kinds are Olives, Arbutus berries, and Spanish chestnuts. Ripe olives are here sometimes used in cooking as well as the unripe or green fruit. Nothing can exceed the beauty of the bright scarlet coloured fruit of the Arbutus, both on the tree and when prettily arranged with leaves as a dish for dessert; it is juicy, cooling, and sweet, but without any special peculiarity of flavour. There are few more beautiful shrubs than an Arbutus tree laden with its fruit, as seen in many parts of the Riviera, and especially in the garden of the Duc de Vallombrosa at Cannes.

Everywhere in San Remo during the winter are baskets of Spanish chestnuts; these in fact form a staple article of food with the natives both poor and rich; they are usually eaten boiled, when they are really very nice—sweet, mealy, highly nutritious, and by no means so indigestible as might be supposed.

Here as in other countries, when winter commences, the 'marchand de marrons,' with his pan of bright burning charcoal, makes his appearance in the streets, the savoury odour of roasted chestnuts perfuming the air, while in the windows of confectioners' shops trays filled with 'marrons glacés,' are temptingly displayed. Sometimes the chestnuts are deprived of their shells and dried; in this state they may be kept for any length of time. Soaked in water

they recover their former size and consistence, and are again ready for use.

In the markets of Italy and France many articles are frequently to be seen, and are commonly used as food, which are never consumed in England.

The Italians, like the French, regard nearly everything as fit for human food, and it must be admitted that they thus add very considerably to their food supplies. Many people have been accustomed to laugh at the French for eating and liking such things as frogs and snails; but if we examine the matter by the light of common sense, the French certainly deserve much praise for the discrimination and knowledge which they display in making use of sources of food supply rejected without reason by the people of most other countries.

There is a great deal of mere fancy and much more prejudice about what many people eat and what they refuse as food. Nearly every animal substance, and every living thing to be found on the surface of the earth or in the water, is good for food when prepared in a suitable manner. It was the French who first taught us the value of horse-flesh as well as of many other things. The quality of the articles thus consumed varies no doubt, but they are all sources of nourishment and contain the principles necessary for the sustenance of the body.

Visiting a French fish-market, such as that of Boulogne, one is astonished at the large quantities of uncouth-looking and often coarse fish there displayed, but which yet find ready purchasers. At the Halles Centrales in Paris we see bushels of large snails, white and clean, quite as pleasing to the eye as are the whelks, winkles, and many other shell-fish which are held in good esteem by even the fastidious Briton. In the same markets may be seen numerous bundles of frogs' legs tied together in hundreds, the flesh of which is more delicate than that of the tenderest chicken; indeed, the quantity seen there is often really amazing, and makes one fear that the poor frog has a harder time of it in France than in most other countries, where nearly every part of his wonderfully constituted

little frame is in such requisition by the physiologist and the microscopist.

Again, if we visit the shores of the Mediterranean and inspect the fish-market in any of the towns there, as for instance Cannes, we frequently see not only large quantities of cuttlefish exposed for sale, but sea-urchins, many different kinds of univalve and bivalve mollusca as well as other curious creatures, all destined for food. Among bivalve mollusca I have noticed the following. A species of Pinna; Mactra stellarum, L.; Venus verrucosa, L.; Tapes decussata, L.; and Scrobicularia piperata, Gmelin; and amongst univalves, Murex trunculus, L.; Murex brandaris, L.; Natica hebræa, Martyn; Natica olla, M. de Serres; and Trochus (Labio) turbonatus, Born. I have never met with one of these species in the English markets, the kinds principally partaken of in England being the Cockle, Cardium edule; the Mussel, Mytilus edulis; the common Whelk, Buccinum undatum; and the Periwinkle, Littorina littorea.

Lastly, during the winter months, in the market-place of the same town, hundreds and even thousands of small birds, frequently fastened on to strings, are exposed for sale, the birds being separately arranged according to the species; such as thrushes, blackbirds, starlings, larks, sparrows, chaffinches, goldfinches, linnets and a great variety of other birds, including even the little Robin, which with us is almost sacredly preserved. But the sale of small birds is not confined to the market at Cannes: they are to be found in large quantities in all towns of the Riviera, including, as we have seen, San Remo, where the number of thrushes and blackbirds sometimes exposed for sale is really surprising. Those seen at San Remo are brought chiefly from San Romolo and some of the higher mountains.

In fact it would appear that no bird, however rare or small, is spared. We have even often seen the sparrow-hawk amongst the number, and have certainly felt less pity for his fate than for that of some of the other victims. On one occasion we noticed what appeared very like some

old lady's favourite parrot. All these birds find ready purchasers, and many of them are regularly served up at the hotels and restaurants, forming dainty little morsels which no doubt Englishmen often partake of with relish, although at the same time they condemn the practice of sacrificing to a greed for delicate food these smaller members of the feathered tribes, which while they live confer so much real benefit on man by destroying myriads of insects, many of which are so destructive to vegetation and fruit. So greatly are these small birds in demand, that in nearly every direction round the larger towns of the Riviera, the killing of them is made a regular pursuit. So-called chasseurs may daily be seen prowling down lanes, around gardens and private enclosures where birds congregate, often alarming and annoying passengers and the occupants of the houses. In our quiet walks among the olive groves of San Remo the report of the guns of these small-bird killers may nearly always be heard, even throughout the spring and during the time of breeding. I believe there is a law for the protection of birds during this season, but it is obviously not strictly enforced, which it might readily be, since the men who make it their business to kill these birds, all pay for a licence and are well known to the authorities. For birds of passage the law does not afford any protection whatever, and these may be slain at any time.

Thus while we commend the French and Italians for discarding prejudice and having recourse to so many unused sources of food supply, we must emphatically condemn the wholesale and indiscriminate slaughter above described. But the shooting of these small birds is not the worst feature in the matter; not only are they thus ruthlessly shot, but they are often treacherously snared. An Italian medical man, in his work on the climate of San Remo, thus writes on this subject: 'In the depth of winter, when the mountains are covered with snow, the little birds who love the heights descend on to the slopes of the Apennines and thus to many points of Liguria; the capture with a net, 'la chasse au filet,' in situations sheltered from the wind

then becomes a pleasant excitement, particularly on very cold days.'

It is stated that the prices of most articles of food at San Remo have become nearly doubled within the last few years, but on the whole living is still considerably cheaper there than in England. The only really dear articles, owing to the high duty charged, are tea, coffee, and sugar.

CHAPTER III

Geology of the District—The Winds—Prevailing Winds—Sea and Land Breezes—Rainfall—Temperature—Warmth of the Mediterranean—Saltness—Variation of Meteorological Observations—Division of Seasons—Temperature of San Remo and the other Health Resorts of the Riviera—These Contrasted—The Winter Temperature of San Remo and Hyères contrasted with that of London and Kew—Number of Sunshiny, Cloudy and Rainy days at San Remo, Mentone, Nice, Cannes, &c.—General Characteristics of the Climate of the Riviera—Winter in the Riviera—Table of Mean Temperatures—Opinions of Medical Writers relative to the Climate of San Remo.

SINCE the geological features of a district influence greatly its climate in many ways, a brief sketch of the geology of San Remo and the neighbourhood may now be given before entering upon the question of weather and climate. The hills and mountains which form the protecting amphitheatre of San Remo are full of interest and instruction for the geologist.

Owing to the upheaval and fracture of some of the mountains, the various strata of which they are composed are in many situations plainly visible, some of the secrets of the earth's formation and past history being thereby disclosed.

The higher mountains are composed of limestone, the stratum forming them consisting of what has been termed geologically the lower cretaceous, which corresponds to the lower greensand and Wealden beds of England. It abounds in minute marine fossilised animal organisms. Upon this rests the middle cretaceous stratum equivalent to the upper greensand and gault of England, and it also contains fossils. It is formed of layers of grey and blue argillaceous and sandy shales, with intervening thin laminæ of micaceous sandstone, more or less replete in the cretaceous greensand, including also some beds of argil-

laceous limestone, imbedding layers of nodules of genuine chalk flint. This again is succeeded by the upper cretaceous stratum, corresponding to the white chalk and chalk marls of England: this stratum consists of beds of loosely cemented yellowish grey sandstone, and imbedded in some of them are more or less angular pebbles.

The three strata just mentioned belong, according to the late Professor H. D. Rogers, to the upper secondary formations, although by some the middle and upper strata are regarded as tertiary.

The next strata are all tertiary. The first of these is the middle eocene, there being according to the authority above quoted no lower or upper eocene and no miocene; this consists of a thin limestone, abounding in fossil nummulites, and is much used as a building stone.

The next stratum is formed of the pleiocene clays, made up of beds of blue and whitish clays, containing many characteristic marine fossils.

The uppermost or last stratum is the pleiocene conglomerate, or 'puddingstone,' containing rounded water-worn pebbles of various sizes up to even two feet in diameter. The above details, which may be said to apply in the main to a considerable portion of the Western Riviera, and not merely to that which includes Mentone, San Remo, and the parts more immediately adjacent, are derived from the Geological Chart prepared by Professor Rogers for Dr. Bennet's work entitled 'Winter and Spring on the Shores of the Mediterranean,' a charmingly written and very important work which all travellers should read.

Examples of the layers forming the middle cretaceous stratum may be seen near the shore at a little distance from Capo Verde, which forms the eastern boundary of the bay of San Remo, and also near the Pont St. Louis at Mentone and elsewhere. Examples of the upper cretaceous stratum are to be found between the St. Louis bridge and Ventimiglia, and inside the San Remo and Mentone amphitheatres; indeed, the olive-clad hills of these consist mainly of sandstone. The parapet or coping of the wall forming the southern boundary of the Jardin de l'Impéra-

trice at San Remo consists of the upper cretaceous sandstone, and it forms, like the middle eocene, a very excellent building stone. The same stratum is also met with in many other situations. The blue stone of the middle eocene is to be found in many localities, and especially where there are quarries. Very fine specimens may be seen in the stone quarry now in course of being worked at the extremity of Capo Nero. The formation of a large quarry in such a situation is much to be regretted, as in time it will diminish the important protection afforded by the Cape in its present form against the north-west and west winds.

There are several other stone quarries near San Remo, nearly all of which present features of interest to the geologist.

The pleiocene clays are found at San Remo especially, it being partly built on them, also at Ventimiglia, Mentone, and Roccabruna. Lastly, the pleiocene conglomerate is widely distributed; it is found at Ventimiglia, and the town of Roccabruna is built on it.

'The conglomerate formation observed at Roccabruna, "the brown rock," and at Ventimiglia, extends over an immense area between the Esterels and San Remo, and on the south side of the Maritime Alps. In some regions also it attains extreme development. Thus it is found on the course of the Var and of the Vesubie, as also on a great part of the right side of the Roya valley. On the left side it principally forms the mountainous elevation which separates the Roya from the valley of the Nervia. Above Bordighera, at the Testa di Alpe, according to Dr. Nièpce, of Nice, it attains an elevation of above 5000 feet.' (Bennet.)

The primary or igneous rocks are not represented at San Remo or Mentone; they are found, however, at Beaulieu, Villefranche, Antibes, and in the valley of the Roya.

Dr. Onetti, in his work on the climate of San Remo, writing of the clay, thus expresses himself: 'In the tertiary formation there exists a vast basin of yellow clay, suitable for potters' use, and known under the name of figuline. It forms large masses alternating with little

deposits of sand and stones, and encloses specimens of different univalve and bivalve shells, of echinidæ, and particularly of Briosopsis genei, as also numerous débris of leaves of cotyledons, which in their shape call to mind the appearance of the Plane and the Evergreen Oak. This clay extends from the hill of the Sanctuary of the Madonna della Costa, to a part of the valley of San Francia. We close these few remarks by informing the reader that in the upper sediments layers of stones conglomerated with sand are met with, the whole being cemented with the valves of pectens and oysters.'

Now, the preceding details are replete with interest, the geology of a district, as already remarked, influencing greatly the climate, and so bearing upon the question of its salubrity and suitability for invalids; it likewise exerts a most important influence on the character, composition, and fertility of the soil, and the fitness of this to the growth of certain kinds of trees, shrubs, and plants.

The word climate is used to denote the prevailing character of the weather in any given place or country; and weather, to signify the frequent or even diurnal variations of temperature, wind, and rain.

The climate depends upon the degree of heat, the nature of the winds, and the amount and character of the rainfall; these again, being dependent upon and modified by latitude, and the physical characters of the surrounding country, as the presence or absence of mountains, the height and direction of these, propinquity to the sea, or to arid plains or deserts. As will presently become obvious, each of the circumstances above referred to exercises a very marked influence on the character of the climate of the Western Riviera, including San Remo; and it should be understood, making due allowance for certain minor peculiarities and differences, that the whole of the Riviera possesses very much the same climate, the main differences being determined by the relative height of the protecting mountains, their proximity to the sea, and the more or less unbroken chain which they form.

The Western Riviera is limited on the west by Nice,

and on the east by Genoa, about one hundred and sixteen miles intervening between these two places.

Now, the sea-shore along the whole of this line is sheltered to a greater or less extent by ranges of lofty mountains. It is to these that the special features of the climate of the Riviera are mainly due, the mountains influencing alike winds, rain, and temperature.

The prevailing Winds of the San Remo district in the winter are northerly. Owing to the height of the mountains forming the semicircle around San Remo, these winds blow over the district and strike the sea at some distance from the shore, although their effect in a reduction of the temperature is still felt in a marked degree.

The north winds pass over the high mountain chains of Europe, the north-east wind coming even from the Arctic regions; and these winds thus become both cold and very dry, their moisture being lost as they blow over the higher Alpine mountains, on which it becomes precipitated in the form of snow.

The chief of these chains are the Alpes Maritimes, which attain in some places an elevation of several thousand feet, and the Apennines; behind the former, far inland, lie the higher Alps which separate Italy from Switzerland.

The north-west wind, crossing over lower mountain chains, and sometimes even the North Atlantic, is less dry than the north and north-east winds, but the latter, as also the east wind, are more moist and less irritating here than in England. In consequence of the excessive dryness and prevalence of the northerly winds during the winter, the whole aspect and character of land, sea, and sky are changed; the winds being deprived of moisture, the sky is no longer shrouded by vapour, mists, and clouds, but is seen of its natural light blue colour, which is reflected in the water of the Mediterranean; the sun shines forth in undimmed splendour, and its rays reach the earth in full force, giving warmth to both animate and inanimate nature.

The sun sunk to rest, the day ended, and night com-

menced, the moon and stars in their turn become visible, and shine forth with a brilliancy and beauty which must be seen to be appreciated, and which is utterly unknown in lands of vapour and of cloud. The 'Angel's Path' is no longer a narrow streak of light, but shines with a broad effulgent brightness.

The north-west wind, or much dreaded Mistral, is occasionally experienced with great severity in some places on the north shores of the Mediterranean, as at Cannes and Nice; but this wind is but little felt at San Remo, it not reaching the town as a north-west wind at all, but, usually rounding Capo Nero, it comes upon it as a south-west wind, sometimes cold, bracing, and exhilarating, but at others disagreeable from its keenness and the dust to which it gives rise.

Dr. Bennet, in the work already quoted, writes: 'Sometimes, however, the north-west wind blows no longer as a local wind, originating in the south of France, but as a grand north-west European wind, coming from the North seas and North-west Atlantic; then it brings black clouds loaded with rain, which may fall in the district or out at sea, and the difference between the wet and dry-bulb thermometers diminishes.

'Thus when rain does fall with a north-west wind, the cause is generally a grand oceanic and European north-westerly storm; but such rain is rare. It is still more so with the strictly continental winds, the north-east and the east. Indeed, when rain falls at Mentone with any such winds it is generally at the end of a European gale from these regions covering all Europe with snow and ice, of which the newspapers bring us the details a few days later. Such rain becomes snow on the higher elevations of the mountains that surround and enclose Mentone.'

Dr. C. T. Williams rejects the views just quoted as to the origin of the Mistral, chiefly on these grounds: first, that the gigantic force of this wind cannot be satisfactorily accounted for by any theory assigning it a merely local origin; and second, that the effect of the earth's rotation upon a wind blowing from the north pole to the equator,

would be to convert it into a north-east wind, and he considers that it probably originates in an upper current, coming from the direction of the Atlantic and descending on the region affected by it, in consequence of the air over the warm Mediterranean basin becoming heated and rarefied so as to produce a partial vacuum, into which the cold upper current descends. For further details the reader is referred to the work of Dr. Williams on the 'Climate of the South of France.'

It has been already stated that the valleys which separate the hills immediately around San Remo all terminate upon the sides of the mountains, and that in these there is no opening or gap, whereby the northerly winds can enter, so that in no situation do they blow directly upon the town, their influence being mainly felt in the reduction of temperature which they occasion, and even when they do reach it, it is rather as south-east and south-west than north-east and north-west winds, they rounding the promontories of Capo Nero and Capo Verde.

The San Remo amphitheatre is of course open to the southerly winds; these warm winds, in passing over the Atlantic and the Mediterranean, take up large quantities of moisture: this is especially the case with the south-west wind, which after coming from the Atlantic traverses the Mediterranean from Gibraltar to the Gulf of Genoa, reaching the coast surcharged with moisture which readily becomes precipitated as rain, especially when brought into contact with the cold northerly winds. These winds are therefore both warm and moist, bringing to the district, and indeed to the Western Riviera generally, warmth and frequently rain.

The south-east wind originates in the deserts of Africa, which it leaves as a very hot and dry wind, but as it passes over the Mediterranean it takes up much moisture and reaches the shores of Southern Italy as a hot, moist, and very enervating wind, constituting the much dreaded Sirocco; but by the time it arrives at this part of the Western Riviera, it has become, by its passage over the

Apennines and the Corsican mountains much dryer and cooler, and hence deprived in a measure of its injurious qualities. In the latter part of the winter, when the Corsican mountains are covered with much snow, it may even bring snow to this coast. Dr. C. T. Williams, however, writes of the Sirocco, 'My own experience of this wind at Nice and Mentone is, that it is moister than in South Italy, but at times very warm and enervating.'

It is frequently a matter of difficulty in many parts of the Riviera, and especially in the San Remo and Mentone amphitheatres, to determine from which direction the wind really does blow; this arises partly from the deflections of the wind caused by the mountains, and from the conflict which takes place when winds travelling from opposing quarters meet, and partly from the course of the winds being diverted, as by the sea breeze, or the promontories bounding the bay on either side; thus winds that are really northerly sometimes enter the bay, as already remarked, under the guise of southerly winds.

Hence we meet with different and somewhat contradictory statements in books as to which are the prevailing winds. Dr. Panizzi states that at San Remo east and west winds alternate almost all the year round. At Mentone the prevailing winter winds are described as northerly, and the same is the case at San Remo, as shown in the following instructive table, compiled at my request by Signor Rodi of the official Meteorological Observatory at San Remo. The observations were taken three times a day, at 9 A.M., 3 and 9 P.M.

	1866	1867	1868	1869	1870	1871	1872	1873	1874	1875
January	N	NW	NNW	NE	NE	N	NE	W	N	NW
February	NNE	NE	NW	NE	—	E-SW	E	W	ENE	NW
March	SSW	SW	WNW	NE	—	NE	E	E	NW	NE
April	W	E	S	W	E	E	W	W	W	—
May	S	W	W	W	E	E	E	W	W	—
June	SSE	W	W	W	E	E	E	E	E	E
July	S-WSW	E	WSW	W	E	SW	E-W	E	W	W
August	S-N	W	W	W	E	E	E-W	SW	W	—
September	NE	W	NW	E	E	E	—	SW	W	—
October	N	N	S	E	W	NE	W	N	E	—
November	N-NNW	N	NNW	NE	NE	NE	N	N	E	W
December	N	NNW	W-N	NE	NE	NE	E-NW	NW	NW	NW

In cases of doubt, recourse may be had to the wet-bulb thermometer, it being remembered that as a rule northerly winds are dry and southerly moist.

We have next to consider the subject of the day or Sea breeze and the night or Land breeze. These breezes especially prevail in hot and tropical regions, but they are also experienced on the coast of the Riviera during clear sunshiny weather in summer, and to a less extent in winter. The hours during which the sea breeze prevails vary with the season of the year; in summer it begins as early as 8 in the morning and ends about 5 o'clock in the afternoon, but in winter it does not commence until about 11 and ceases about 3 o'clock.

The explanation of the occurrence of the sea breeze is as follows: the air below and near to the mountains becoming rarefied, ascends and passes over their tops, the cool air from the sea constantly and continuously flowing in towards the land, to be in its turn similarly heated and rarefied.

'But,' to quote Dr. Bennet, who has studied this subject closely, 'for a decided sea breeze thus to rise in winter there must be a strong wind blowing from some of the northern quarters. When this is the case, in the early part of the day, until about 11 o'clock, the north wind only reaching the sea at some distance from the beach, owing to the mountain protection, leaves the water in shore calm or nearly so. The sea air, that later rushes in to supply the place of the rarefied land air, pushing angry billows before it, is merely the north wind, which, having passed overhead and gone out to sea, is pulled back by the mid-day heat. When the air is perfectly calm in the upper and lower atmospheric regions, the calm of the early morning continues all day, because there is then no strong wind and angry sea to be drawn inland by the effects of land heat. The latter in winter is not sufficiently great to create this little monsoon, when the atmosphere is in a state of complete repose.'

Now, this north wind, thus pulled back in winter, it should be remembered is often a very cold wind; further-

more, from its contact with the sea it imbibes moisture, and thus becomes less dry than northerly winds usually are.

But at night a contrary process is in operation, giving rise to the land breeze; in this case, the heat of the sun being withdrawn, the cool mountain air descends to the sea. This land breeze, particularly in winter, does not blow with any great force; when, however, sudden changes of temperature take place between land and sea, it may and often does come on with much suddenness and power, constituting then a great danger to sailing vessels which may happen to be near the coast. It is in the ravines and valleys leading to the shore that this land breeze is mostly felt.

In the morning, between the subsidence of the land and the commencement of the sea breeze, there is usually a period of calm lasting two or three hours, and a similar period of repose in the afternoon, the duration of which varies according to the length of the day and the amount of sunshine.

The sea and land breezes, it is obvious, must exercise a considerable influence on the temperature of the air at and near the shore, the former making the air cool in the day, and the latter having a similar effect at night; and it is to them that the comparative coolness of the day and night during the summer in San Remo and in the more sheltered parts of the Riviera, is to be attributed.

Notwithstanding the shelter afforded by the high mountain ranges, the shores of the Western Riviera are much subjected to the action of winds, and especially southerly winds; these blow often with violence, more particularly at the periods of the autumn and spring equinoxes. When the air is calm and but little wind prevailing, the sea is smooth and the waves break on the shore in gentle cadence; but with a strong wind, the white-crested waves rise on the surface in quick succession, as in the case of more northern seas, and dash on the beach with a loud and angry roar. At these times the sea is full of life, freshness, and motion, and is very unlike what might be supposed when one reads in books that the Mediterranean is a

landlocked and almost tideless sea. It is not, however, absolutely tideless, as it has a rise and fall of nearly one foot, but in consequence of the action of the winds, the sea frequently advances and recedes several feet.

Since the winds exercise so great an influence on rain and its amount, it was necessary to treat of them in the first place, so that the subject of the Rainfall, now to be considered, might be the more readily explained and understood.

It has already been stated that the northerly winds are for the most part dry, and the southerly moist, and the reasons of this difference have been likewise briefly pointed out. The warm southerly winds, passing over large tracts of water, from the surface of which aqueous vapour is constantly being given off, become more or less laden with moisture; this may be so diffused as to be invisible to the eye, but when these winds come into contact with the colder northerly winds, this moisture is rendered visible as vapours and clouds, more or less dense and dark. Again, if these clouds are subjected to the action of a still greater degree of cold, then their tangible moisture is still further condensed and it falls as rain; if to a still higher degree of cold, as in the passage of rain-charged clouds over the higher mountains, the moisture becomes frozen and is precipitated in the form of snow.

The rain on the shores of the Western Riviera falls chiefly at two periods of the year: namely, at the autumnal and vernal equinoxes. The autumn rainfall usually begins near the end of September, continues at intervals through October, and extends sometimes even into November; the spring rainfall commences generally in March, and may include the early part of April, but the exact time of the commencement and termination of the equinoctial rains varies in different years.

The autumn equinox being over, there is usually a lengthened period of dry weather, with a prevalence of northerly winds; the spring equinox ended, a still longer dry period, of from five to even six months, is sometimes experienced. The great dryness of the summer on the

shores of the Mediterranean is due to the fact that this sea is placed near the northern limit of what is known as the 'rainless tract,' which comprises the sandy Desert of Sahara.

This dryness renders the storage of water in large tanks and frequent irrigation, usually by means of innumerable water channels, which on low-lying grounds one sees everywhere, absolutely indispensable to the preservation of the Orange, Lemon, and many other trees and vegetable productions.

When rain comes with a northerly wind, it is usually gentle, but when with a southerly it often descends with almost tropical violence, as much as 4 and 5 inches having been known to fall in a single day. When such tropical rain falls on the mountains, the beds of the torrents and rivers become suddenly filled with large volumes of water; this rushes impetuously to the sea, carrying with it great quantities of earth, stones, pieces of rock, and all kinds of débris. Very quickly, however, the rivers recover their usual and comparatively insignificant proportions, and their wide, stony, and unsightly-looking beds are once more exposed to view. Those who are not acquainted with the effects of a sudden and heavy rainfall, often wonder at the insignificance of most of the rivers in the Riviera in comparison with the size of their beds, which seem far wider than could ever be required. This is observed to be the case particularly with the Paillon at Nice and the Roya at Ventimiglia.

This heavy downpour takes place especially at the point where the south and north winds meet; sometimes, as Dr. Bennet has so well shown, this happens at the top of the mountain ranges, at others it occurs a little way out at sea, the weather on the shore-line remaining bright and fine all the time.

The number of days on which rain falls, and the amount of the rainfall, vary in different parts of the Western Riviera, this variation being mainly determined by the height, form, and arrangement of the contiguous and protecting mountains.

At San Remo, according to Dr. Onetti, there are but

45 days in the year on which rain falls, but he does not give the data upon which this average is based. Knowing that careful records are kept at the Observatory at San Remo, I addressed to Signor Rodi a number of enquiries having reference to the rainfall, temperature, and other particulars bearing upon the climate, and I thus obtained much fresh and valuable information; for which I am greatly indebted to him. I find that from January 1, 1866, to December 31, 1877, omitting the somewhat doubtful year 1870, rain fell on 490 days, giving an average of 48 days per year.

But since the winter season at San Remo extends from November 1 to the end of April, it became important to determine the average number of days on which rain fell during that period, and I found it to be 29·70 days. The number of rainy days, however, fails to give a very complete idea of the character of the rainfall, I therefore obtained the record of the number of hours during which rain actually fell, and I ascertained that it amounted to no more than 195·6 hours for the whole year, or a little over 8 days and nights.

I have not included the observations for 1878 and the first half of 1879, because owing to special circumstances they were not complete; this is much to be regretted, as the weather during the greater part of that period was so exceptional, especially as regards the number of rainy days and the rainfall, and to a less extent the temperature, that the observations would have affected the averages, not only for San Remo, but for the whole of the Western Riviera. Turning to my own notes I find that rain fell during the winter season of 1878–79, commencing November 1, on no less than 74 days; it should be stated, however, that the day included the whole 24 hours, and hence on some of the days enumerated rain fell only in the night. The amount of the rainfall was also excessive.

In Mentone, according to De Brea, the average number of rainy days is 80 8, this calculation being founded on the observations of ten years; 43·8 of the number occurred during the six season months and 37·0 in the remaining

six months. At Nice the average, according to Roubaudi, amounts to 60, but De Valcourt gives it as 70 days. At Cannes, according to Sèves, as quoted by Dr. Williams, the number of rainy days is but 52, but Dr. de Valcourt, whose observations are based upon a series of years and may doubtless be accepted as correct, states that they amount to no less than 70 days, 38 of these occurring during the season of six months. I would remind the reader that the majority of rainy days are not days of continuous rain, but are so far fine, and often bright and sunny, as to allow of outdoor exercise.

The average number of rainy days at Bordighera, according to Dr. Semeria, is 45, but the data on which this calculation rests are scarcely sufficient to establish a true average.

The greater number of wet days at Mentone is remarkable, and would appear to be explained by the height and proximity of the protecting mountain range, especially at the eastern bay.

It has been pointed out that the principal rainfalls occur usually in September and early in October; in March and the first part of April. Now, the invalids who come to the Riviera in search of health, do not generally arrive until after the termination of the autumnal equinox, so that they usually escape this first great rainfall, and have only to encounter the second period, that of the vernal equinox. Thus the actual number of rainy days to which an invalid would be exposed during the winter season at San Remo would not on the average exceed 30 days.

Contrast for a moment the preceding figures with the number of rainy days in even some of the most favoured places in England, as Ventnor, Bournemouth, and Torquay. It appears that during the years 1876, 1877, and 1878, rain fell in Ventnor on no less than 524 days, giving an average of 174·6 days for each year; also that, taking the six months' winter season, beginning November 1, for the two seasons 1876-1877 and 1877-1878, rain fell on 210 days, making an average of 105 days each. At Bournemouth, in the course of ten

years, commencing with 1866 and ending December 1878, the years 1872, '75, '77 not being given, in consequence of the incompleteness of the observations, rain fell on 1563 days, showing an average of 156·3 for each year, and in eleven winter seasons it fell on 967 days, making an average of 87·90 for each season. Lastly, at Torquay (Babbacombe), during the years 1877 and 1878 rain fell on 400 days, giving an average of 200 days for each of these years.

As the number of rainy days varies in different parts of the Riviera, so naturally does the rainfall, as will now be shown. It would appear, however, that data are still required to determine the average rainfall at nearly all the smaller towns of the Western Riviera. The only published records I have met with respecting the amount of the rainfall at San Remo is that given by Dr. Onetti, who states that it is about 720 millimètres = 28·34 inches; this statement is no doubt founded upon the observations taken at the Observatory at San Remo. I have examined these also, and find that the average annual rainfall from January 1866 to the end of 1877, omitting the year 1870, amounted to 731 millimètres = 28·78 inches.

There does not appear to be any record of the amount of the rainfall at Bordighera.

The varying number of rainy days for a series of years, winter seasons, the hours of actual rainfall and the amount of this at San Remo, are clearly set forth in the following table.

Years	Days in Year	Days in Winter	Hours in Year	Annual Amount
				inches
1866	63	35	225·50	43·30
1867	61	36	181·30	23·36
1868	55	29	172·50	26·19
1869	35	27	—	16·18
1871	43	22	110·30	20·43
1872	61	44	336·00	57·08
1873	45	45	161·45	31·92
1874	39	20	169·45	20·20
1875	35	25	—	18·79
1877	43	33	208·50	30·42

The records as to the amount of the rainfall at Mentone are very defective. From October 9, 1859, to April 21, 1860, it amounted, according to the rain gauge of a friend of Dr. Bennet's, to 23·68 inches; but since the average number of rainy days in the year is 80, the probability is that the rainfall at Mentone is greater than in any other place on the Western Riviera. At Nice the rainfall is stated to be 25, a very low estimate, and at Cannes, according to Dr. de Valcourt, it is 35·43 inches. Let us compare these figures with the rainfall at the three English health resorts already referred to. At Ventnor the average rainfall for the years 1876, '77, and '78 amounted to 34·54 inches. At Bournemouth, for the ten years already mentioned, the average annual rainfall amounted to 28·81 inches, being nearly the same amount as at San Remo. Lastly, at Torquay (Babbacombe), the mean of the rainfall for the years 1877 and '78 was 39·66 inches.

The following table comprises the annual number of rainy days, and the amount of the rainfall, at some of the principal winter health resorts of Europe.

	Days	Inches
San Remo	48	28·78
Mentone	80 De Brea	23·68*
Nice	70 De Valcourt 60 Roubaudi	25
Cannes	70 „	35·43
Hyères	63 „	27
Pau	119	43
Malaga	40 Francis	16·50
Madeira	88 White	30
Ventnor	174·6	34·54
Bournemouth	156·3	28·81
Torquay	200	39·66

* For six months only

Having now considered the subject of the winds and rain at San Remo, and to some extent the Western Riviera generally, we now pass on to the question of Temperature.

The temperature of any given locality is affected by and dependent upon a variety of circumstances and condi-

tions: as its position, its surroundings, whether sheltered or not, the character of the prevailing winds, and the extent to which clouds and rain prevail. The effects of some of these influences have already been referred to, but they will become more obvious as we proceed.

As already stated, the latitude of San Remo is 43° 48′, thus it lies about 460 miles more to the south than London, and hence it follows, independently of other circumstances, that the temperature of San Remo is several degrees higher than that of London. But the Western Riviera and the towns placed thereon are all protected more or less effectually by the mountain ranges already mentioned; these run east and west, and so shelter the Riviera, which lies beneath them, from the northerly winds, it thus forming an extended undercliff.

But these same mountains have also an effect on the southerly winds, holding them back as it were on the coast-line beneath the mountains, warmth being thereby retained. The north, as we have seen, are the dry winds, especially in winter, and during their prevalence, as a rule, vapour, clouds, and rain disappear, and the sky is of a deep and uniform blue colour; the sun then shines with all its natural brilliancy and force, the whole of its rays, in place of being intercepted, reaching and warming the earth.

The sun thus shining on the protecting mountains, these absorb much heat, especially in summer, by the end of which they have become regular storehouses of caloric. This they lose in part at night, but retain by far the larger portion till the approach of winter, when they gradually yield it up, so contributing to increase the warmth of the air at that season, particularly in those cases in which the mountains form an amphitheatre around towns, as at San Rèmo, Mentone, and some other places.

There is still another cause which contributes to the exceptional warmth of San Remo and the Mediterranean coast generally, and that is the high temperature of the Mediterranean itself, attributable in part to its non-admixture with the colder water of the Atlantic, which

enters this inland sea only in small quantity through the Straits of Gibraltar. This warm sea is continually giving out a portion of its heat, and so raises the temperature of the air near it. Referring to this subject Dr. C. T. Williams, in his very interesting and instructive work already noticed, writes: 'The Mediterranean is naturally divided into three basins—the western, bounded eastwards by the Adventure and Medina banks, which lie between Sicily and Africa; the eastern; and the basin of the Greek archipelago—the last two being separated by a ridge 200 fathoms deep. According to the careful soundings of Captain Spratt ("Travels and Researches in Crete") these basins are very deep, the western being 9600 feet, and the eastern as much as 13,800 feet. But the most extraordinary phenomenon is the temperature, which at the depth of 100 fathoms in the eastern and western basins amounts to 59½° Fahr., whereas, according to the researches of Ross, Belcher, Denham, and Pullen, that of the Atlantic, at the same depth and in the same latitude, is only 39½° Fahr., showing a difference of 20° between the two seas.' 'The changes of temperature consequent on the seasons do not embrace more than a fall of 10° in winter, and a rise of from ten to twenty in summer, and these changes only extend to the depth of 100 fathoms.' . . 'The Rev. R. D. Graves' observations on the temperature of the Mediterranean off San Remo, show that in the months of November, December, and January, at a depth of four feet, it was never below 60° Fahr. in the daytime.'

This sea therefore exercises an important influence in raising and equalising the temperature of the places upon its shore, and helps to explain in part their freedom from frost.

But the Mediterranean differs from other seas, not only in its remarkably high temperature, but in some other particulars, which, although less immediately connected with the subject of temperature, may here be referred to: as the greater concentration and weight of its water. Thus while the water of the Atlantic off

Bayonne contains as much as 38 parts of saline matter in 1000, according to Messrs. Legrange and Vogel, in that off Marseilles there is as much as 41 in 1000 parts. The analyses of Messrs. Schweitzer and Laurent are nearly to the same effect; the water of the British Channel containing 35·2, and that of the Mediterranean 40·74 in 1000 parts. This greater concentration of the water of the Mediterranean is mainly due to three causes: the small amount of water which this inland sea receives through the Straits of Gibraltar, the smallness of the rivers and streams which empty themselves into it, and the evaporation constantly going on, due in part to its own warmth, but mainly to the influence of the sun, mostly shining in a sky unobscured by clouds. The intense blue colour of the Mediterranean has already been referred to, and it was partly explained by the dryness and clearness of the atmosphere allowing of the reflection in it of the bright blue sky; but the quantity of saline matter contained in it has been shown to be the principal cause of its depth of colour.

The influence of the sea and land breezes, the one in moderating the day, and the other the night temperature, has already been explained.

Having thus briefly referred to the principal causes in operation which combine to impart to the Riviera, especially in the winter, its exceptionally mild character, figures will now be given to show the actual temperature at San Remo and the other health resorts of the Riviera. Before giving the figures, it will be well to enter into a few details respecting meteorological observations generally.

The temperatures given in books, unless when otherwise stated, are shade temperatures: that is to say, the instruments are placed in such a position that the direct rays of the sun do not reach them, and so do not raise the column of mercury; but it is not always stated whether the instruments thus shaded are placed in a southern or northern aspect. Now, the indications afforded by thermometers in a north aspect will, under the same circum-

stances of time and weather, be several degrees lower than those in a south aspect.

Then again, the results will vary according to the manner and times at which the observations are taken. Some observers are content with two observations each day, others consider three necessary; further, there is no uniformity in the hours selected for recording the results. Some take the maximum and minimum temperatures by means of self-registering instruments; this is the easiest, and perhaps on the whole the most certain and satisfactory way, and although the results obtained by the two methods are not identical, yet they very closely correspond. Furthermore, the temperature is influenced by a variety of surrounding circumstances, as the proximity of radiating media, such as rocks, walls, banks, the surface of the earth, and the vegetation. All these render it exceedingly difficult to obtain, even in the same town, two sets of observations which precisely correspond, and the difficulty of course is increased in the case of different localities, so that implicit reliance is not always to be placed on comparisons of one locality with another, when the differences of temperature are not very considerable. Neither can absolute reliance be placed on a comparison of the medium temperatures of one town with those of another; thus two places may furnish the same media and yet the climate be totally different. For example, the winter medium of 60° Fahr. would indicate a mild climate, but this medium might be made up of very cold nights and very hot days, as has been shown by Dr. Dalrymple to be the case in the Upper Nile. Even season media are not sufficiently detailed to allow of the character of a climate being judged of accurately. The points to be noticed particularly in comparing one place with another are the frequency with which the highest and lowest points are reached, and the extent of the variation between the two places.

Notwithstanding the great pains and labour which have been bestowed upon meteorological records, and the great number of observers who have directed their atten-

tion to meteorology, the information as yet acquired is in many cases not nearly so complete as is to be desired, or might be imagined. The records of the early observers are in some cases open to doubt in consequence of the imperfection of the instruments used and of the methods employed. Then again, the records of a few months, or of a single season, however accurate, go but a little way in determining the character of the climate of any particular place: this can only be satisfactorily done by taking the averages of a series of years.

The custom in England is to divide the year into four equal portions or seasons of three months each: the first three months being called spring, the second summer, the third autumn, and the fourth winter. This is a very arbitrary, and at the same time a very artificial division; in the first place the seasons are not of equal length, and in the second the two coldest months of the year are usually December and January, and yet one of these months only, according to the practice above referred to, belongs to the winter, and the other to the spring. The Italians, having more regard to the actual seasons, have adopted a more natural division; they also divide the twelve months into four equal periods, but the winter with them begins December 1, and the autumn terminates November 30, but this arrangement has the great disadvantage of embracing portions of two years and not being, as is the English method, complete in the one. Neither plan, therefore, can be regarded as altogether satisfactory. Even the duration of the seasons varies with the climate and the country; in England five months might fairly be allotted to the winter.

Having recourse again to the records of the Meteorological Observatory at San Remo, I find according to the English division of the year, the average three months' spring temperature for nine consecutive years to the end of 1874 to be 49·81; the average summer temperature 63·04, the autumn 72·27, and the winter 55·21, the mean annual for the nine years being 60·08 Fahren-

heit. Of course the average temperatures of the seasons varied with the years, the extent of the variations being shown in the following table :

Year	Spring	Summer	Autumn	Winter	Annual
1866	51·69	62·00	70·88	57·02	60·40
1867	50·41	63·62	71·99	54·28	60·08
1868	49·11	65·60	73·92	56·49	61·28
1869	48·84	63·68	70·59	54·59	59·42
1870	49·15	64·29	71·15	54·17	59·69
1871	49·19	61·93	72·48	52·52	59·03
1872	51·49	62·43	73·29	56·95	61·05
1873	51·56	62·52	74·26	57·14	61·37
1874	46·83	61·30	71·87	53·70	58·43

Following the Italian rule for the division of the year, which is that usually adopted in warm climates, the figures stand as follows :

Year	Winter	Spring	Summer	Autumn	Annual
1865–66	50·55	56·34	71·03	62·76	60·17
1866–67	49·86	57·76	71·82	61·17	60·16
1867–68	47·53	58·04	75·20	62·11	60·72
1868–69	50·38	57·10	72·83	62·31	60·66
1869–70	48·64	58·03	73·45	63·11	60·81
1870–71	46·69	58·10	69·93	62·35	59·27
1871–72	48·30	57·90	71·86	62·70	60·19
1872–73	50·57	58·32	74·10	60·48	60·87
1873–74	47·50	54·31	71·83	59·74	58·35

The above figures give a mean winter temperature of 48·89 ; spring 57·32 ; summer 72·45 ; autumn 61·86 and a mean annual temperature of 60·13, which differs only very slightly from the mean annual based upon nine years commencing January 1.

The preceding figures however fail to furnish all the information required. The usual season at San Remo extends from November 1 to the end of April ; what, therefore, has to be ascertained is the mean temperature for that period, and this will be found set forth in the next table.

The mean of the following nine seasons is 51·55 Fahrenheit.

Seasons	Average temperature	Seasons	Average temperature
1865–66	52·58	1869–70	51·42
1866–67	52·10	1870–71	50·95
1867–68	50·32	1871–72	51·65
1868–69	51·62	1872–73	53·30
	1873–74 . . . 50·00		

It is much to be regretted that owing to some omissions in the registrations the observations could not be brought down continuously to a later date.

The monthly variations of temperature during the nine years over which the observations extend, are shown in the annexed table.

	1865–66	1866–67	1867–68	1868–69	1869–70	1870–71	1871–72	1872–73	1873–74	Mean
November . .	55·27	52·44	52·43	52·98	53·04	54·53	52·75	55·56	52·88	53·54
December . .	48· 9	50·84	46·40	53·15	50·45	45·66	44·33	52·80	50·64	49·25
January . .	49·20	47·85	46·45	46·25	45·51	44·79	49·19	50·52	45·33	47·23
February . .	53·45	50·91	49·76	51·74	49·96	49·64	51·38	48·39	46·54	50·19
March . . .	52·43	52·50	51·13	48·54	51·98	53·15	53·94	55·79	48·59	52·00
April . . .	55·97	58·04	55·74	57·03	57·57	57·92	58·33	56·73	56·04	57·04
May . . .	60·63	62·76	67·26	65·75	64·56	63·23	61·43	62·45	58·30	62·93
June . . .	69·42	70·09	73·81	68·27	70·73	64·68	67·56	68·43	69·55	69·17
July . . .	73·36	72·12	75·23	76·06	75·59	71·51	74·04	76·48	74·62	74·33
August . .	70·32	73·25	75·58	74·17	74·03	73·61	73·97	77·39	71·33	73·85
September . .	68·95	70·64	69·96	72·35	72·50	72·17	69·93	68·92	69·69	70·57
October . .	66·90	60·46	63·39	61·55	62·31	62·13	62·58	59·64	57·27	61·80

The above figures prove that December and January are by far the coldest months, the latter being the colder; that February ranks next, and then in order March, November, and April. The hottest month is July, and then follow August, September, and June. It is a curious circumstance that the mean temperature of the nine years for May, June, and July, 68·81, is almost identical with that for August, September, and October, namely, 68·74.

There are still some other important points in reference to temperature, which from the paucity of the materials at my command I can only touch upon, namely,

the maximum and minimum temperatures at San Remo, and the extent of the variations of temperature.

The winter of 1863–64 was one of exceptional severity, and the coast of the Mediterranean suffered from long continued cold winds. Notwithstanding this, according to the observations of Dr. McKinnell, made with a thermometer exposed to the north, and recorded in a table given in the work of Dr. Prosser James, entitled 'The Climate of San Remo and other Winter Stations on the Mediterranean,' the mean minimum temperature was 46·96, the mean maximum 56·17, the mean of both for that season, commencing November 1 and ending April 15, being as high as 51·56. According to the same authority, the minimum daily range of temperature was 7·1, the maximum 10·86, and the mean of these 9·22. Notwithstanding the severity of this season especially in most other places, frost occurred in San Remo only twice in January, the thermometer being but 2° below the freezing point; and once in February, with 1° of frost.

The smallness of the daily range of temperature is remarkable, and can be equalled only by few places. At Nice during the same period the minimum was 19·0 and the maximum 27·5, the mean being 22·7 Fahr.

In a letter published in the third edition of the little book by the late Mr. Aspinall, so often noticed, Dr. Daubeny gives some meteorological data for the winter seasons of 1865-66, '66–67, '67–68, '68–69, beginning November 1, and ending April 30. From an examination of these I have deduced the following particulars. The mean of all the maxima observations amounted to 60·2, that of the minima to 44·5, the mean of both being 52·7. The mean daily variation ranged between 11·8 and 19·2, the mean for the whole winter being as much as 14·7, a range, as will be seen, some degrees higher than that of Dr. McKinnell. The absolute maxima readings for the four winters ranged between 60·0 and 76·0; the absolute minima between 33·0, which it reached in December 1867 and in March 1868; 32 in January 1867 and 1868 and in

March 1869; 25·0 in January 1869, and the highest 57·0 in November 1865.

Mr. Pirouet has made some interesting observations of the temperature in a south room at 9.30 A.M., with the window open and without a fire, during the six months' season of 1876–77, beginning November 1. The highest temperatures for each month were 64°, 63°, 61°, 63°, 63°, and 65°, and the lowest 52°, 54°, 55°, 56°, 54°, 61°.

The only records of temperature I have for the unusually severe winter season of 1878–79 are some maxima and minima observations kindly furnished me by Dr. Turner, and of these the following is a summary:

	Maximum	Minimum	Mean
November	56·83	45·43	51·13
December	51·03	39·22	45·12
January	54·77	42·83	48·80
February	58·33	43·51	50·92
March	61·78	44·39	53·08
April	63·46	46·56	55·01
Mean	57·70	43·66	50·68

The maxima observations for the month of February were somewhat incomplete, but still not sufficiently so to materially affect the average for the whole season. It will be observed, that the mean of this season, which, like that of 1863–64, was one of considerable severity, amounted to 50·68, as contrasted with 51·55 the mean of the nine seasons' observations at the Observatory. This difference is less than might have been anticipated, and is to be explained, I believe, by the position of the instruments at the Meteorological Observatory at San Remo, these being placed at the top of a lofty house, where they are probably less influenced by radiation than they would be if nearer the ground. There is great need of an international code of regulations under which all meteorological observations should be taken; under such a code comparisons of one town with another would be very much more exact and reliable.

During the month of November of the season 1878–79, the thermometer descended only on one occasion as low as 41; in December it was once as low as 31, or 1° of frost, and this was the lowest point which the thermometer reached during that season; but on fifteen days of the same month it ranged between 34 and 39. In January it descended once to 35, once to 36, four times to 38, and three times to 39°. In February the lowest reading was 35, which was registered once only, 36 twice, and 37 once. On March 1 the thermometer stood at 37, and on the 2nd at 39; for the remainder of the month and of the season the minimum was always much above 40°, gradually increasing as the season advanced. The lowest maximum temperature registered, namely, 45°, occurred on December 9; and this was followed by six days of cold weather, during which the thermometer ranged between 46 and 48. With the exception of these days the maxima readings fluctuated between 50° (reached only once) and 68°, being, for the most part, much nearer 60° than 50°.

The winter temperature of San Remo, as will be more fully apparent hereafter, is therefore one of the warmest in Italy. Frosts are of rare occurrence, and are always very slight, while snow is still more rare, although occasionally seen on the surrounding mountains. The summer is by no means hot, the mean temperature, as we have seen, being 72·45.

We will now give the particulars, as far as they are known, respecting the other health resorts of the Riviera; and first Bordighera. The mean annual temperature, taking the whole years of 1876, '77, and '78 amounted to 60·12, but omitting the first-named year, which appears to have been unusually cold, it was as high as 60·69. The mean of the two years commencing December 1, 1876, and ending November 30, 1878, was 61·16, and that of the two six months' winter seasons for the same years, commencing November 1, was 52·23. This is a high average, for which one can see no sufficient reason, having

regard to the situation and topography of Bordighera. This average is, however, exceeded by the observations of Dr. Semeria for the six months' seasons of 1866–67, '67–68, '68–69, and '69–70, who makes the mean to be 53·61. Further observations appear to be required to determine accurately the relative temperature of Bordighera, and these will no doubt be shortly forthcoming, as Mr. F. Hamilton has already commenced to collect a series of meteorological data; it is to be hoped that these will be carried out in such a way as to allow of a strict comparison with the other health resorts of the Riviera. Dr. C. T. Williams states, on the authority of the Rev. A. Craig, that the mean temperature of this place during the months of January, February, and March 1867, was lower than that of San Remo, but the daily range less; also that the hygrometrical observations taken at 9 A.M. showed a difference of 2·8 between the bulbs, compared with 2·4 at Nice for the same period.

The following are the mean temperatures of the several months of the year at Mentone, for a series of 10 years from 1850 to 1860, as recorded by Monsieur de Brea.

Winter Season			Summer Season		
	Centigrade	Fahrenheit		Centigrade	Fahrenheit
November .	12·2	53·96	May . .	17·8	64·04
December .	9·5	49·10	June . .	21·6	70·88
January .	9·3	48·74	July . .	24·1	75·38
February .	9·5	49·10	August .	24·1	75·38
March . .	11·5	52·70	September .	20·8	69·44
April . .	14·6	58·28	October .	17·9	64·22
Mean . .	11·1	51·98	Mean . .	21·05	69·89
Mean annual for the 10 years 16·07 C. = 60·9 Fahr.					

According to the observations of Dr. Bennet, extending over a period of fifteen years from 1859 to 1874, the mean minimum temperature for the six months beginning with November was 45·9, the mean maximum for the same period 58·2, the mean of both being 52·05. Dr. Bennet also states that the combined mean of his own and

M. de Brea's observations for 25 years amounts to 51·7 only, but I make the mean of the 25 years 52·01. The mean temperature of the three winter months, December, January, and February, at Mentone, according to Dr. Bennet, is 48·56, which is rather less than the mean for the same months at San Remo, viz. 48·89; but the mean given by M. de Brea for Mentone is higher, viz. 48·98.

Dr. Bennet states that the thermometer seldom descends below 40° at night in the winter, or ascends above 50°, it ranging usually between these two points; also that the shade temperature in the day varies from 50° to 58°, although it occasionally falls below 50° Fahr. This latter temperature always coincides with a low night temperature and an obscured sky, nearly always with snow on the mountains and rain on the shore, and with north-west or north-east winds.

The meteorological observations of Dr. Bennet were doubtless made in the warmer or eastern bay, as were also most probably those of M. de Brea; but since the western bay is much colder than the eastern, some observations contrasting the respective temperatures of the two bays are much to be desired.

The only observations having reference to the western bay with which I am acquainted, are those by Dr. Siordet for the season of 1862–63, beginning November 1; the mean minimum temperature was 44·49, the mean maximum 57·43, the mean winter temperature therefore 50·96. The figures given by Dr. Bennet for the same year were as follows: mean minimum temperature 45·76, mean maximum 57·93, and the mean temperature for the whole winter 51·84, showing a difference between the two bays of nearly one degree.

Turning now to Nice, we find that the mean temperature of that city, as given by Sir James Clark, is as follows: spring 57·1, summer 72·3, autumn 61·6, and winter 47·8; the mean annual temperature being 59·7.

Passing to Cannes, Dr. Williams, without mentioning the authority, gives the three months' winter temperature

as 48·0, but Dr. de Valcourt makes it as high as 49·64 and the mean annual temperature 59·90. Dr. Marcet, in his pamphlet 'On the Weather at Cannes,' gives the mean temperature of the six winter months beginning with November for 1874–75 as 50·5, and that for the winter of 1875–76 as 50·8.

Having thus brought together all the principal data bearing upon the temperature and rainfall of the chief towns of the Riviera, I will now contrast very briefly some of these places.

It has been shown, that the mean temperature of the three winter months, December, January, and February, at San Remo, is 48·89, and that for the whole year, ending 30th November, 60·13; that the mean six months' season temperature beginning November 1 is 51·55, also that the number of days on which rain falls in the year is 48, and the rainfall for the same period 28·78 inches.

With respect to Mentone the mean temperature of the three winter months is, according to Dr. Bennet, 48·5, of the six months' season 52·0, and the mean annual, according to M. de Brea, 60·9. The amount of rainfall at Mentone does not appear to have been ascertained, but Dr. Bennet found it to exceed 23 inches in six months, while the number of rainy days is 80·8.

The mean temperature of the three winter months for Nice, according to the table of Sir J. Clark, is 47·8, and the mean for the whole year 59·5; the rainfall 25 inches, and the number of rainy days as given by De Valcourt 70, but according to Roubaudi 60 only.

The mean three months' winter temperature at Cannes, as given by Williams, is 48·0, but according to De Valcourt it is 49·64; the mean of the six season months is 50·65 (Marcet), and that of the whole year 59·90 (De Valcourt); the number of rainy days in the year 70, and the rainfall 35·43 inches.

The mean dryness of the air at San Remo for four winters was 5·4, and at Mentone for twelve winters, according to Dr. Bennet, 5·1. At Mentone during the winter months of 1864–65, Dr. Bennet found that the

average difference between the wet and dry bulbs was 6·07. At Carabaçel, near Nice, according to Dr. Cabrol, as quoted by Dr. C. T. Williams, the mean average difference for the same period was 4·92. The significance of these figures will be apparent when it is stated that the difference between the dry and wet bulbs at Kew for the same winter months was only 1·46. With the Mistral blowing there is sometimes a difference of 10 degrees between the wet and dry bulbs.

The opinion is entertained by many that the stimulating quality of the air of the Riviera is intimately connected with its dryness, but the following figures, having reference to the relative humidity of the air, prove that the dryness is by no means so great as might be supposed: 100 being the point of saturation, the mean of the relative humidity of the air at San Remo during the six season months for the ten years from 1866 to 1875 inclusive was 68·5, the lowest monthly mean reached during that period being 55·8, and the highest 83·1. At Cannes, according to De Valcourt, the mean relative humidity was 65·2 and the monthly range between 63° and 69°. With a strong Mistral, the relative humidity sometimes descends as low as 22.

The mean tension of the air at San Remo for the period above referred to was 6·93, and at Cannes 7·14.

The mean daily range of temperature at San Remo, according to Dr. McKinnell, as we have seen, was 9·22 for the winter of 1863–64, and 14·7, according to Dr. Daubeny, for the four following years over which his observations extended. No details are given of the mean daily range of temperature at Mentone, but Dr. Bennet states that it is 12·8. This result corresponds very closely with that obtained by Dr. Siordet at Mentone for the six winter months beginning with November for the years 1861–62 and 1862–63, namely, 12·24. The highest monthly range for both winters occurred in April, and was for the first-named year 12·7, and for the second 17·85. The range for Nice is considerably higher. Small as is the daily range of temperature in most parts of the

Riviera, it is yet much less in the Islands and on the south shore of the Mediterranean.

Contrasting San Remo and Mentone, we find that the winter, the six months' season, and the annual temperatures of San Remo, as indeed might have been expected, are a little lower than those of the eastern bay of Mentone; the rainy days, however, at San Remo are much fewer.

With respect to Nice, the figures given show that it is colder than either San Remo or Mentone, the daily range of temperature greater, and the number of rainy days intermediate.

Lastly, it appears from the statistics that Cannes is also colder than San Remo and Mentone, that the rainfall is greater than at San Remo and Nice, and that the number of rainy days is also greater than at the former place, but less than at the latter.

It has now been abundantly established that the winter climate of the three principal health resorts of the Western Riviera, and even of Cannes, is of considerable mildness, but this fact will become still more evident on a comparison of the temperature of San Remo with that of the three English health resorts already referred to in connection with the rainfall. The mean annual temperature of San Remo is 60·13 and the mean six months' season 51·55. The mean annual temperature of Bournemouth for 9 years from December 1, 1866, to November 30, 1878, but omitting '72, '75, and '77, was 49·66, and the mean six months' season temperature for the years above named was 43·31. The mean annual temperature for Torquay from 1 December, 1877, to November 30, 1878, was 50·23, and that for the season 44·65. Lastly, the mean annual temperature of Ventnor for the two years 1876–77 and '77–78 was 51·95, and that for the two seasons 46·58. The preceding figures show a difference in the annual temperature in favour of San Remo of 10·56 in the case of Bournemouth, of 9·99 in that of Torquay, and 8·27 for Ventnor; the differences for the seasons being respectively 8·24, 6·90, and 4·97 degrees.

For the data upon which the calculations of the tem-

perature of Bournemouth, Torquay, and Ventnor are based, I am indebted to the kindness of Mr. Humphreys, of the General Register Office. It is to be regretted that the observations for the two latter places do not extend over a longer period, but as far as they go they are thoroughly reliable, and I believe that had they done so, the general results obtained would not differ materially from those now recorded.

But the difference of temperature may be shown in a still more striking manner.

The winter of 1878–79 was the severest, both on the Riviera and in England, which has been experienced for many years. In the following table the minimum night temperature is shown for the month of January at the gardens of the Royal Botanical Society, Regent's Park, London, and at San Remo for the same period. The records at the latter place were kindly furnished me by Major Toone.

1879	Regent's Park	San Remo	1879	Regent's Park	San Remo
January 1 .	42·0	47	January 17 .	29·0	41
„ 2 .	28·5	50	„ 18 .	29·5	40
„ 3 .	28·0	47	„ 19 .	31·4	43
„ 4 .	27·0	46	„ 20 .	27·0	40
„ 5 .	24·0	42	„ 21 .	26·8	42
„ 6 .	20·0	37	„ 22 .	27·8	51
„ 7 .	28·7	39	„ 23 .	23·0	55
„ 8 .	25·0	38	„ 24 .	28·0	54
„ 9 .	24·0	34	„ 25 .	27·0	49
„ 10 .	24·0	40	„ 26 .	30·0	48
„ 11 .	20·0	40	„ 27 .	32·0	46
„ 12 .	16·0	41	„ 28 .	30·0	47
„ 13 .	28·0	44	„ 29 .	28·8	44
„ 14 .	37·0	44	„ 30 .	30·8	44
„ 15 .	36·0	44	„ 31 .	28·5	44
„ 16 .	26·0	44			

It will be seen from an examination of the above table that on January 23, the difference of temperature between the two places amounted to 32°; the mean daily difference for the whole month was a little over 16 degrees.

But Dr. C. T. Williams has brought into even still stronger contrast, in the following table, the great difference which frequently exists between the winter temperature of the north shore of the Mediterranean and England.

1867	Minimum		Maximum	
	Kew	Hyères	Kew	Hyères
January 2	19·9	50·0	28·7	54·0
„ 3	5·7	52·0	28·6	55·0
„ 4	5·0	54·0	16·4	57·0
„ 5	1·0	52·0	30·8	56·0
„ 14	10·5	58·0	29·8	65·0
„ 15	14·3	56·0	31·3	64·0
March 17	27·3	53·0	36·9	67·0
„ 18	11·5	55·0	32·7	67·0

The difference shown in the above table is really extraordinary, and amounted on one occasion to no less than 51° Fahrenheit; indeed the cold of Europe does not appear to have penetrated to Hyères at all in that year.

As still further elucidating the six months' season climate of the Western Riviera, the number of Sunshiny, Cloudy, and Rainy days for San Remo, Mentone, and Nice will now be given, and to these places Cannes may be added.

It appears that out of 1661 winter season days, at San Remo, 596 were cloudless, the sky being blue and the sun shining brightly; 694 were days of mixed sunshine and cloud, and 369 days were cloudy without sun; rain fell on 293 days, snow on two days only, and twelve were days of storm. In this classification the same days are sometimes enumerated twice, thus many of the days on which rain fell were also days of cloud.

M. de Brea, whose statistics for Mentone have already been quoted, gives the number of sunshiny days for the 10 years as 2140; of partly sunshiny 457, of cloudy 248, and of rainy 808 days. These figures average for the year 214 sunshiny days; 45·7 partly sunshiny, 24·8 cloudy, and 80·8 rainy.

Dr. Marcet, in his pamphlet 'On the Weather at Cannes,' gives a table of the general weather at Nice for the seasons of 1872–73 and 1873–74. Of the 181 days of the season first referred to 111 were fine, 20 overcast, and 50 rainy. Of the second season, 137 were fine, 13 overcast, and 31 rainy.

Dr. Marcet gives the number of fine days at Cannes for the season of 1874-75 as 117, of overcast 15, and of rainy days 49; and for the winter of 1875–76 the numbers were 113 fine days, 12 overcast, and 60 rainy.

Dr. de Valcourt gives the average number of cloudless days for the season at Cannes as 92, of days of mixed cloud and sun 64, and of cloudy days without sun, as 25; in this enumeration the days on which rain falls are not indicated.

The above statistics of the number of fine and sunshiny days certainly convey a most pleasing picture of the climate of the more sheltered parts of the Riviera, and they show how immeasurably superior it is to our English climate. In our own country the invalid in winter is kept in the house for days and even weeks together, whereas the days on which he cannot enjoy the benefits of fresh air, exercise, and even sunshine, are here comparatively few.

During the six months' season, taking San Remo as a type, the weather in the Riviera is dry, mild, bracing, and sometimes even cold; also bright and sunny, with a brilliant blue sky and sea. In the summer it is even more dry, but still fresh; of course very warm, though rarely excessively hot and never close and sultry, with a still more brilliant sunshine and an even brighter sky and sea.

It must not be imagined, however, that winter is not experienced in the Western Riviera, only it sets in later, terminates earlier, and is rarely severe, the utmost inclemency experienced being the very occasional and temporary presence of slight frost, with sometimes snow on the higher mountains. In most winters it does not freeze at all in the more sheltered parts below the mountains or on the shore level.

The cold is, however, sufficiently great to make fires

necessary at least during three out of the six months of the season, especially on cloudy, wet, and sunless days, and also in the evenings; on such occasions the fire should not be spared, although it is somewhat expensive. The fuel consists almost entirely of the wood of the Olive tree, and the heat given out is not nearly equal to that of a good English coal fire; still if the wood fire be well kept up, it gives a fair amount of warmth and is free from the objectionable sulphur compounds generated by the combustion of coal, and hence it does not vitiate the air of the rooms to the same extent. The fires are lighted at San Remo and other places on the Riviera with fir cones, which are collected from the fir forests of the higher mountains in large quantities; it is sufficient simply to apply a match to them and they at once burst into a flame, owing to the large quantity of resin they contain; these cones constitute the most elegant, fragrant, and effective of fire-kindlers.

The annexed table of the mean temperature of different cities and health resorts, founded on that of Sir James Clark, will be useful for reference. It must be understood that the winter months include December, January, and February, except in the case of Port Jackson, Port Philip, and Auckland; in these the winter months are June, July, and August; the spring September, October, November; the summer December, January, February; and the autumn March, April, and May. The original table contained many errors of calculation, which as far as possible have been rectified.

The opinions of various writers, chiefly medical, relative to the climate of San Remo may now be cited, most of these, by a residence there, having had ample opportunities of arriving at correct conclusions.

Mr. Aspinall has thus recorded the opinion entertained by him:

'San Remo has a delightful climate, so fresh and bracing and yet so balmy; there is even a certain amount of humidity in the air, especially at the east end of the town, which suits some invalids better than too dry an atmosphere. As far as my own experience goes I have

	Annual	Winter	Spring	Summer	Autumn
Cairo	72·17	58·52	73·58	85·10	71·48
Santa Cruz (Canaries)	71·09	64·65	68·87	76·68	74·17
Ceylon Hill District[2]	70·31	69·45	71·65	69·37	70·78
Malta[3]	67·28	57·46	62·43	78·20	71·03
Corfu	65·55	54·28	59·85	77·09	70·97
Madeira[1]	64·97	60·47	62·44	69·60	67·32
Algiers (added)	64·50	55·00	66·00	77·00	60·00
Palermo „	63·47	53·10	59·30	74·70	66·80
Port Jackson[2]	62·54	54·67	63·53	67·49	64·46
Cadiz	62·05	52·90	59·53	70·43	65·35
St. Michael's (Azores)	62·42	57·87	61·17	68·33	62·33
Naples	61·29	48·50	58·50	74·17	64·00
Mentone (added)	60·93	48·98	58·34	73·88	62·54
Rome	60·67	48·90	57·65	72·16	63·96
Pisa	60·38	46·37	57·19	75·19	62·80
Genoa	60·37	44·90	58·60	75·03	62·98
San Remo	60·13	48·89	57·32	72·45	61·86
Cannes	59·90	49·64	57·38	72·96	60·98
Marseilles	58·90	45·48	57·56	72·50	60·08
Toulon	58·41	43·33	57·00	74 33	59·00
Nice	59·48	47·82	56·20	72·27	61·63
Hyères	—	47·30	—	—	—
Florence	58·76	44·33	56·00	74·00	60·70
Port Philip (N.S.W.)[2]	58·98	50·07	58·40	67·50	59·97
Auckland (N.Z.)[2]	58·42	50·68	56·82	66·38	59·82
Montpelier	57·58	44·33	53·33	71·33	61·33
Pau	56·18	42·53	54·06	70·73	57·40
Malaga (added)	—	56·00	—	—	—
Undercliff[1]	51·36	41·89	49·33	60·64	53·58
Ventnor (added)[4]	51·95	45·95	48·05	61·00	52·80
Torquay „	50·23	43·30	47·63	59·83	50·16
Bournemouth (added)	49·66	41·17	47·12	59·95	50·43
Paris	51·41	38·43	50·40	64·47	52·33
London[1]	50·39	39·13	48·76	62·32	51·35
Camden Town (added)	50·23	40·68	48·26	61·77	50·20
Greenwich (added)	48·53	37·97	46·50	60·20	49·46

[1] Register Thermometer. [2] Common Thermometer. [3] Doubtful.
[4] These observations were taken at The Royal National Hospital for Consumption and Diseases of the Chest, Ventnor.

To convert Centigrade into Fahrenheit multiply by 1·80 and add 32 if above the freezing point, and subtract from 32 if below.

To convert Réaumur into Fahrenheit, multiply by 2·25 and add 32 if above freezing and subtract from 32 if below.

not found any other climate from which I have derived so much benefit, though I have passed a winter in Madeira, another in Egypt, and shorter periods in Rome, Naples, and

Sorrento. It combines in a modified degree the invigorating qualities of Nice with the warmth of Mentone, but without its closeness. There must be something peculiarly soothing and conducive to sleep in the air of San Remo; at Nice sleeplessness was a general complaint, and I, amongst others, suffered dreadfully. Here on the contrary I scarcely pass a sleepless night, and I find it has the same effect almost universally.' 'Another way in which nature has been wonderfully and specially kind to San Remo is in protecting it almost as well from the heat of summer as from the cold of winter; the sun rises out of the sea in mid-winter, but as the summer advances its gradual progress towards the north brings it behind the mountains, the natural consequence of which is, that it rises about an hour and a half later in San Remo than in the more level country, and also rises later there in April than in February; the same applies to its setting, so that there are actually 2 or 3 hours less of the sun's heat in the day. This also makes the twilight very long and peculiarly delightful and cool.'

The late Dr. Rose, who lived and practised for some years at San Remo, where he was for a time Vice-Consul, in a pamphlet entitled 'Climate and Phthisis,' has thus written: 'Its climate is intermediate between the east and west ends of Mentone, not so warm as the former and more sheltered than the latter, the air being also more soothing than at Cannes, Nice, and Mentone. This depends on the fact that the ground is covered to the water's edge with Orange, Lemon, and Olive trees, thus preventing too rapid evaporation, and the soil, being principally clay, prevents the rain percolating through so rapidly as it would in sandy and gravelly soil.'

Dr. Daubeny, in his pamphlet 'The Climate of San Remo as adapted to Invalids,' writes: 'San Remo is quite free from sea fogs or mists, and the vapour which sometimes surrounds the higher mountains never descends into the plain. Snow rarely falls in the town or in the near neighbourhood; there have been successive winters without any except on the distant hills. Ice is nearly unknown.'

'There are no large torrent beds passing through the town; and admitting the cold cutting winds from the snowy mountains, as at Nice; and sufficient space exists between the lower range of hills and the sea to allow of a more free circulation of air than is obtained at Mentone, particularly in the eastern bay.' 'Although the soil is argillaceous, the climate is one of the driest in Europe, and a soil which in England is objectionable acts here beneficially, by giving forth sufficient moisture to modify the stimulating character of the air.'

Dr. Prosser James, in his brochure on 'The Climate of San Remo and other Winter Stations of the Mediterranean,' has discussed and considered fully the merits of San Remo as a winter station. He writes: 'Protection from injurious winds is then the chief characteristic of the climate. At the same time, as a very large space is encircled by these hills (the land of the commune comprises 4200 mètres), there is never that stifling feeling, produced by want of ventilation, which is such a drawback to those resorts which are built immediately under protecting or overhanging cliffs. Even when all is calm below, strong winds may sweep freely over the town and agitate the sea beyond the precincts of the bay.'

Further on, Dr. James thus expresses himself: 'San Remo then, with its warmer and more equable temperature, its calmer atmosphere, its tone-giving elasticity, its dryness and other attractions, must be preferable to any of the other stations in certain cases. These are for the most part those for which other localities are too stimulant.'

'We hold,' writes Dr. Onetti, 'San Remo, e il suo Clima,' 'as very rare the climates which maintain an equal temperature and which show extremely slight oscillations, as that of San Remo: warm in winter, cool in summer, and delicious in spring and autumn.'

Another medical writer who was for a time at San Remo, and afterwards at Nice, Dr. Pasquale, wrote: 'San Remo has a most beautiful and picturesque situation, the most sheltered, mild, and healthy spot that can be found on the Mediterranean coast.'

Dr. Sigmund, a distinguished physician of Vienna, in his 'Südliche Klimatische Kurorte,' thus summarises the advantages of San Remo; 'an equable warm air, absence of the dust and noise of a large town; good drinking water, a rich evergreen vegetation, abundant opportunity for exercise in the open air, without the great variations of temperature to which Nice is subject, and pleasing environs.'

The writer of 'Les Villes d'Hiver de la Méditerranée,' remarks:—'The climate of San Remo is one of the mildest and most agreeable of the Ligurian coast. San Remo is renowned for its fruits, its flowers, and its almost tropical vegetation.'

'San Remo,' said the late Dr. Bottini of Mentone, 'where the Lemon tree likewise flourishes in the open air, is from the clearness of its sky and the richness of its vegetation, one of the most salubrious stations of the south.'

Dr. Henry Bennet of Mentone bears the following testimony: 'San Remo deserves the patronage of winter emigrants. The climate is the same as that of the western bay at Mentone, and no doubt all who do well at the one would do well at the other.'

Another well-known medical writer on climate, Dr. Edwin Lee, in 'Menton and San Remo,' after making some considerable quotations from the work of Dr. Prosser James, expresses his general concurrence in the observations of that writer, 'considering them valuable as coming from one whose attention has been directed to the subject of climate, and who, in thus speaking highly of San Remo, cannot be supposed to have been actuated by any motive of a personal nature.'

Dr. C. T. Williams has thus written of San Remo: 'The climate of San Remo is warm and dry, and from the protecting ranges not rising precipitously as at Menton, but sloping gradually back, the shelter from the northerly winds is not quite so perfect as at the last named place: At the same time the vast Olive groves screen the locality from any cold blasts, and the breezes which filter through the Olives impart a pleasing freshness to the atmosphere and remove sensations of lassitude often experienced in

well-protected spots. The size of the sheltered area gives patients a considerable choice of residences, which can be found either close to, or at varying distances from the sea, according to the requirements of the case.'

The last author whose opinion I will quote is Dr. Walshe: 'The Lemon tree flourishes with peculiar vigour; the flora of the district is marvellously beautiful. The air is dry, rainy days few and far between; the dust not seriously troublesome. The wideness of the space, encircled by the hills, allows of free (sometimes too free) movement of air in and about the town. The quality of the atmosphere seems to be tonic without being excitant, exhilarating and yet soothing.' In a word, the spot seems to 'combine in a modified degree the bracing qualities of Nice with the warmth but without the closeness of Mentone.' 'The noise of the surge gives no annoyance here as at Mentone,—the houses being built at some height above the sea-level.'

CHAPTER IV.

Characteristic Vegetation of the Riviera—Shrubs and Flowers in blossom at San Remo in October and at the beginning of the Year—Scent-giving Flowers, Wild Shrubs, Plants, and Flowers—Vegetation of the Riviera chiefly evergreen—Evidence of Mildness of the winter climate of the Riviera derived from the vegetation—The Olive tree—Gathering of the olives—Process of obtaining the oil—The Lemon tree—The Orange tree—The Eucalyptus—The Pepper tree—The Prickly Pear—Evidences of mildness of the climate derived from Birds—Fish—Reptiles—Insects—Mosquitoes—Curious and rare Animal Productions.

THE mild character of the winter climate of San Remo and the Western Riviera generally has already been demonstrated by a variety of circumstances and data, but the proofs are not yet complete and others may now be cited of a different kind; namely those furnished by the Fauna and especially the Botany of the district. Most of the vegetation differs so much from that to which we are accustomed in Great Britain and other cold and northerly climates, that the aspect of the country is entirely changed, presenting in some cases a semi-tropical appearance.

Approaching the Riviera from Marseilles, the eye is first attracted by the Olive trees scattered here and there on the way—these are by no means large or imposing however until Cannes is reached; here the scene becomes completely changed and we see for the first time the vegetation which imparts to the Riviera its peculiar features. Thus we now notice extensive groves of large Olive trees, with some Orange trees, occasional Palms, and towering above all numerous magnificent specimens of the Blue Gum, or Eucalyptus globulus. This latter forms the most conspicuous feature in the landscape, although it is only about twenty years since that it was first intro-

duced into Cannes: so rapid however, has been its growth, that many of the specimens have attained the dimensions of lofty forest trees; and so well has it flourished here that it has been planted nearly all along the Riviera, many fine trees being seen almost everywhere.

As we near Nice the number of Orange trees is seen to have increased; in sheltered situations groves of Lemon trees are also observed for the first time, while Palms occur more frequently. When we reach Mentone we find that the Lemon has almost taken the place of the Orange tree, and here we notice that the encircling hills are thickly clad with Olive trees of great size and age. At Bordighera the scene for a short distance becomes truly oriental from the number and size of the groves of Palm trees, the age of some of which is said to exceed a thousand years. At San Remo the Lemon tree abounds as at Mentone, with of course many Orange trees, while here the protecting hills and sheltering valleys are clothed with perfect forests of Olive trees stretching far away to the base of the higher mountains. These Olive forests cover many miles of ground, and when we walk over the hills or through the valleys, we find that they are planted on terraces faced with walls of rough stones; of these terraces there are tens of thousands, and the toil involved in their construction is almost inconceivable. When I first saw the vine-clad terraces at Rüdesheim on the Rhine, I was astonished at the labour which must have been expended on their formation, but these bear no comparison for extent with the Olive terraces in and around San Remo and, indeed, many other places on the Western Riviera.

The three trees therefore, which give to the Riviera its special features are the Olive, Orange, and Lemon trees: add to these the majestic Eucalyptus and the graceful Palm, and the picture becomes tolerably complete.

But on the way along the Riviera, numerous other trees attract our notice; the Esterel mountains are clothed with fine specimens of the Cork tree, a species of evergreen oak, Quercus Suber; from the stems and branches of many of these, the outer bark or cork has been stripped, expos-

ing to view the inner bark of a beautiful rich chocolate colour. So abundant are the cork trees on these mountains, that the removal of the bark constitutes a considerable industry.

Next we observe, as we near Cannes, many examples of that singular looking Fir, the Stone or Umbrella pine, Pinus pinea; indeed just before entering Cannes there is a regular grove or park of them, and although specimens of this pine are occasionally to be met with further on the route, yet nowhere are they to be seen in such numbers and perfection as at Cannes. Then in many localities throughout the Riviera, especially on hill tops and other elevated situations, the pyramidal Cypress, Cupressus pyramidalis, is noticed, some of the trees being of great size and age; these are usually placed near churches or other buildings, which they appear to guard like sentinels, their lofty bare cylindrical stems and dark-green pyramidal summits towering above the surrounding trees and standing clearly out against the sky, thus constituting another characteristic feature of the Rivierean landscape. Another tree which attracts attention by its abundance and beauty is the Pepper tree, Schinus molle, with its graceful compound leaves and handsome bunches of coral-like berries.

But there are still a few other trees to be described before the list is complete. The Camphor tree, Ligustrum ovalifolium, grows freely nearly all over the Riviera; like so many of the other trees referred to, it is an evergreen: it is distinguished by its dark-green leaves and its bunches of small bluish-black berries, resembling somewhat those of the Elder tree. Another is the Carouba or Locust tree, Ceratonia siliqua, with its beautiful evergreen foliage and large bean-like pods, which contain so much sugar and nitrogenous matter that they are largely used for the feeding of cattle. 'Along with the Carouba may be mentioned Pistacia Lentiscus and Terebinthinus Chio, as peculiarly indicative of a dry, sunshiny southern climate and of a rocky arid region. P. Lentiscus is an evergreen shrub which grows freely in the same regions as the Carouba, flowering during the winter, and is very abundant between Nice and

Ventimiglia, indeed all along the Riviera'—'it forms, I believe, one of the chief botanical features of Palestine and Syria.'—'Terebinthinus Chio is frequently met with on the most sheltered, sunniest, warmest and most arid mountain sides. It is a ligneous shrub or small tree, and is remarkable as being the last tree or shrub met with in the Desert of Sahara on descending from the south slopes of the Atlas.' (Bennet.) Then there are many beautiful and elegant species of Acacia; these grow in great abundance nearly all over the Riviera, and some of them attain a very considerable size: they blossom freely early in the spring, the flowers giving forth a delicate and highly agreeable perfume, which in many places scents the surrounding air. Near the Château St. Léon at Cannes is an avenue of Acacias, which have attained almost the size of forest trees, and which in the spring when covered with their light-yellow blossom are exceedingly beautiful.

Again, Fig trees, some of gigantic size, are everywhere met with; while in many places the Vine is extensively cultivated; this in parts of the Riviera was destroyed some years since owing to the attacks of oïdium and it has not been replanted to anything like its former extent.

In the course of the numerous small streams which flow from the valleys into the sea, large beds of Canes or Bamboos Arundo Donax, L., are seen, often attaining a height of 15 or 20 feet, and so numerous are these that they also form one of the special features of the Rivierean vegetation. In the autumn the canes are cut down in large quantities and much used for protecting hedges and fences and as laths in buildings. It is from these canes that Cannes is said to have derived its name. Growing beside the streams, as well as in many gardens, fine specimens of the Oleander or rose Laurel, Nerium oleander, occur; these often reach a great size, becoming veritable trees, and when in blossom they are extremely beautiful. Another tree which not only blossoms here but ripens its fruit, is the Pomegranate, as also the Shaddock and Citron.

Passing now from the larger trees, the Aloe, and the Prickly Pear, Opuntia vulgaris, also help to give a special

character to the vegetation of the Riviera; these are both abundantly met with in many situations. The Aloe grows very freely, and is often seen as a grand and massive looking plant; the ordinary tradition respecting it is, that it blossoms but once in a hundred years, and that it dies in the effort of bringing its blossom and fruit to maturity. The tradition as to its blossoming only once in a century has no foundation in fact, and it is a very common thing to see Aloes in flower in the Riviera and several even may be seen at the same time in one group. The Aloe however really does gradually wither up and die after it has brought forth its blossom, and this is not surprising when we observe the mast-like flower stem which it throws up to the height of some twenty feet. The Aloe contains strong elastic fibres which are used in England for brush-making, and in Mexico for ropes and mats.

That curious Cactus, the Prickly Pear, a native of Mexico, reaches a considerable size, and flowers and ripens its fruit in great abundance. But very many other Cactaceæ flourish here equally well.

It will be observed that nearly all the trees which have been hitherto described are evergreens, and hence the landscape even in winter bears nearly the same fresh and green aspect it does in the summer.

The deciduous trees, excepting only the Fig and Oriental Plane, are for the most part met with at some distance from the sea, and are found at moderate elevations, either up the valleys or on some of the lower hills, as the Spanish Chestnut and many Fruit trees, the Peach, Almond, Cherry, Medlar, Apple, and Pear.

The Oriental Plane tree, in consequence of the luxuriance and density of its foliage, is found in many towns and is usually planted in avenues with a view to protection from the sun. This tree often grows to a great size; the leaves do not fall off till about the end of December, they are then carefully collected and given to the cows for food. At Cannes, Nice, Mentone, San Remo, and many other towns there are handsome avenues of these trees.

Above the region of the trees which have been hitherto

noticed, and even of the Olive, which rarely grows at an elevation greater than 2000 feet, the mountains become clothed with forests of evergreen firs, except where they are so steep that no soil exists for their growth, the principal species being the Pinus maritima, the timber of which, although soft, is used for building. The Aleppo pine, Pinus Halapensis, is also common.

Quitting now those trees which impart to the landscape its general features, and entering some of the gardens along the Riviera, a whole host of beautiful flowering trees, shrubs and flowers are met with, many of which in our own land are only to be found in greenhouses or even hothouses.

A great variety of the plants which grow and flourish out of doors here are of the tenderest kind, many of which would be fatally injured by the slightest frost; even the fruit of the Lemon tree falls off at 5° of frost and the tree itself is killed at about 8°.

Again, owing to the extreme mildness of the climate, very many of those flowers which are annuals in England and other equally cold countries, here become perennials, some of them attaining considerable size, rivalling veritable shrubs; this is the case with the Petunias, Stocks, Wallflowers, Carnations, Nasturtiums, and also with Cobæa scandens.

The characteristic Palm of this district is the date-bearing palm, Phœnix dactylifera, but several other kinds grow freely without protection in the open air; as the fan-like Palms of the genera Latania and Chamærops, including L. Borbonica and C. excelsa; but a variety of genera and species are cultivated in the gardens of the wealthy, and amongst them the Cocoa-nut Palm.

In very sheltered situations, fine specimens of Musa or Banana are met with, the fruit sometimes even becoming ripe. There are some large examples of Musa Paradisaica in the Public Gardens at San Remo, as also at Bordighera. Musa Ensete is sometimes seen, the leaves of which are usually much grander than those of the first named species in consequence of their being entire and not slit into

pieces. Cycas revoluta also grows in the open air at San Remo and many other places.

On arriving at San Remo about the middle of October the following shrubs and flowers are usually found in blossom in the gardens, and many of them so continue until the end of the year: the double Oleander; the Arbutus, which is then seen laden with its beautiful fruit; Viburnum tenus with its leaves and flowers so closely resembling those of a species of Laurustinus, and with its steel-blue berries; the several varieties of Euonymus, which, unlike that which grows so freely at Ventnor, here blossoms and even ripens its coral-like seeds; Tecoma radicans with its brilliant scarlet flowers; the Malvaceous plant, Sida venosa; several species of Solanaceæ, as Solanum glutinosum, with its turquoise-blue blossoms and marble-like bluish-black berries and S. pseudo-capsicum; Datura Stramonium, which grows at San Remo in great perfection, many specimens attaining a considerable size and when covered with their large white trumpet-shaped blossoms, presenting a very handsome and striking appearance; the very pretty Tree Veronica; the curious Castor-oil plant, Ricinus communis; Melianthus major with its splendid compound leaves; Gomphocarpus fruticosus with its singular bladder-like fructification.

Other plants and flowers also in bloom at this period of the year are the Heliotrope; the Verbena or Lemon plant; the pale blue Plumbago; as well as many kinds of Geraniums, Chrysanthemums, and Roses, as the Gloire de Dijon, Tea Rose, China Rose, and a small damask rose, all of which continue to blossom freely until long after Christmas.

With the new year a great variety of other shrubs and flowers come into blossom, the following being the more noticeable: Sparmannia Africana, Bignonia capensis, Abrotamnus elegans, Justicia adathoda, Cassia tomentosa, Jasminum humilis, Osteospermum moniliferum, Mespilus Japonicus, Cratægus glabra, Spirea lanceolata, Sempervivum patulatum, Raphiolepsis Indica, Mioporum pictum and M. parviflorum, Pittosporum tobira Ait., Mimosa lophante,

Viburnum lucidum, Abutilon Sumatrensis, the Marguerite, Chrysanthemum grandiflorum; Melianthus major, Cineraria platanifolia, Ageratum celeste, v. cæruleum; and lastly several species of Salvia, including S. involucrata.

Amongst creepers may be mentioned the following; the pretty white Solanum jasminoides; Lonicera periclymenum with its small black berries; the beautiful Bougainvillea spectabilis; species of Passion flower, and lastly Sedum Dosyphyllum L. with its fleshy leaves and conspicuous white, pink, scarlet, and blue blossoms. This plant is seen everywhere, covering and giving verdure and beauty to rough banks and walls, which it does, not by climbing up after the fashion of most creepers, but by spreading over them from above. In this way it hangs down and often covers walls of some ten or twelve feet in height and it would doubtless extend still further were it not that at length the stems break off in consequence of the great weight they have to bear.

So favourable is the climate of the Riviera to the growth of scent-giving flowers that several kinds are extensively cultivated, especially in the neighbourhood of Cannes, for the manufacture of perfumes; thus large tracts of land are covered with Roses, one kind grown especially for the sake of the favourite White Rose Scent, another for the Essence or Otto of Rose, the quality of which is much superior to that from the East; other districts are planted with the white Jasmine; with Acacia Farnesiana, the Cassia of the Bible; and lastly, the double blue violet is cultivated in enormous quantities for the sake of its much prized perfume.

Unfortunately the San Remese, as well as the inhabitants of some of the other Rivierean towns, seem to care but little for flowers and gardening, and whatever beauty the gardens possess at San Remo is due rather to nature than to art. Most of the Lemon trees in the town are by no means striking examples of their kind, while the Orange trees are but poor specimens, and this simply because their cultivation is not appreciated for mere purposes of ornament. The San Remese seem to forget

that these trees, especially when in their beauty, are much prized by the many foreign visitors who are unaccustomed to the sight of them in their own countries. To see them in perfection at San Remo it is necessary to go into the valleys.

Leaving now the gardens and strolling through the valleys, over the hills, and up the higher mountains, some of the principal shrubs, plants, and flowers which are met with growing wild, may now be very briefly noticed. On dry and sandy elevations in many localities a very beautiful heath is found, remarkable for its size and for the very handsome spikes of blossom which it bears; this is the Mediterranean Heath, Erica arborea; it flowers in February and March. Unfortunately, large quantities of this heath are annually dug up for the sake of its roots, of which the so-called briar-root pipes are made. Another species is the well-known Ling heath, Calluna vulgaris, which comes into flower in December.

In the same situations different species of Juniper are found.

The Myrtle, which with us grows only as a choice plant and in the most sheltered situations, requiring even then special protection in the winter, is met with as a wild shrub nearly all over the Riviera. The Iles Lérins, opposite Cannes, are almost covered with Myrtle, it forming in fact a kind of brushwood which is periodically cut down and used as fuel for bakers' ovens; in favourable situations, however, where it is allowed to grow freely, it attains the size of the largest Laurustinus bushes, not only flowering but ripening its abundant blackish-blue berries.

Although the Strawberry Tree, Arbutus Unedo, is frequently seen in gardens, into which it is introduced in consequence of the great beauty of its fruit, which ripens only the second year, it is also found growing wild in many places.

A very bright and cheerful-looking plant, although a very common one, is the Prickly Broom, Calycotome spinosa, with its abundant golden blossom; it flowers in

the month of April. Spartium junceum, distinguished by its rush-like stems, the absence of regular leaves, and its yellow blossoms, sometimes occurs in the same localities, flowering about the same time.

The Rosemary, which in England is a garden plant, is here found in profusion on the higher hills and mountains, and is very beautiful, flowering all the winter. The Lavender is also met with in the wild state.

Among other conspicuous wild plants are several species of Cistus or Rock rose, one distinguished by the large size of its pale pink blossoms and the white woolly under surface of its leaves, Cistus albidus. This species is found growing on the hills and mountains in large quantities in company with Rosemary and other plants of the same habit; this Cistus flowers in April.

A plant, which with us is chiefly confined to the greenhouse, namely the golden Coronilla, is here likewise numbered among wild plants; the kind most frequently met with is C. Emerus.

A species of Sarsaparilla, Smilax aspera, occurs in great abundance in the neighbourhood of San Remo, as also elsewhere in the Riviera. It is a very characteristic plant and is distinguished by its sagittate and prickly leaves, and its bunches of round cherry-like berries.

A rarer plant is the Cneorum tricoccum, one of the Terebinthinaceæ, known by its small dark-green leaves and three-lobed seeds; it flowers all the winter, and is found in elevated and dry situations.

Another class of wild plants deserving special notice are the curious Euphorbias with their milk-like juice; some of these become perennials here and attain in favourable situations, as between Villefranche and Mentone, the size of large bushes. Large plants of Rue are also of frequent occurrence.

I pass on now to the smaller kinds of wild flowers. Many so familiar to us in England are found also here, and a simple enumeration of the chief of these will be sufficient: as the very pretty Pheasant's eye, with its cherry-red blossoms, imbedded in finely cut and soft green

leaves, Adonis autumnalis, here called A. æstivalis, but which in the Riviera comes into flower early in April. The common but very pretty Fumitory, Fumaria officinalis, the generic name of which is derived from the Latin word *fumus*, smoke, the ancients having attributed to the smoke of this plant the power to drive away evil spirits; the Stock, Matthiola; Wallflower, Cheiranthus; Wild Mignonette, Reseda lutea; pink Soapwort, Saponaria officinalis, so named from its soapy juice; the Borage, Borago officinalis, which grows in great profusion and forms with its blue blossom so beautiful a contrast with many other flowers; Comfrey, Symphytum officinalis; the Snapdragon, Antirrhinum; several species of Veronica or Speedwell; and of Verbascum; the Primrose, Primula acaulis; the Cowslip, P. veris; the scarlet Pimpernel, Anagallis arvensis, a blue variety of the same being also of not unfrequent occurrence; lastly, the Wild Thyme is met with nearly everywhere on the hills and mountains, it flowering throughout the winter and perfuming the air around.

I will now notice in the order of their appearance those wild flowers which either by their abundance or beauty constitute more or less conspicuous objects in the flora of San Remo and of other parts of the Riviera.

One of the wild flowers first observed on arrival here is a very curious species of Arum, A. Arisarum, distinguished by the cowl-like shape of the hood, which is of a shining brown chocolate colour; this Arum is so abundant that it is seen continually, sometimes in such profusion as to form large beds and to cover some of the Olive terraces. Its bulbous roots, like those of Arum maculatum, are very nutritious and capable of furnishing a kind of arrowroot.

Another flower which equally attracts attention at that time is a kind of Daisy, very different however from the one met with in our own country and which Burns has immortalised; it is not the 'wee, modest, crimson-tipped' flower of the poet, but it nearly rivals in size the ox-eyed daisy, the flowers standing elevated on stalks some six or

eight inches long, always turning their faces gratefully to the sun. From the large size of the flowers, their abundance, and the fact that this daisy blossoms at the period of the year when there are so few wild flowers to be seen, it forms a very welcome and cheerful addition to the winter Flora.

About the middle of December the Sweet-scented Violet, Viola odorata, comes into blossom, and by the beginning of January the ground in many situations is literally carpeted with its blue flowers, and the air around laden with their sweet perfume; it is even found growing abundantly on the stone walls.

Soon after the appearance of the Violet the Hyacinths come into flower: that is to say, in January; of these there are four kinds, which, though called Hyacinths in common parlance, yet really belong to different genera. One of these is the Oriental Hyacinth, Hyacinthus orientalis; this grows in the greatest profusion in some of the valleys around San Remo, and hundreds of bouquets of it are sold daily by the children in the streets; it is the same Hyacinth which in England is cultivated in gardens and grown in glasses; it is usually of a blue or beautiful violet-blue colour, but a white variety is sometimes met with. Another is the very pretty little Grape Hyacinth, Botryanthus vulgaris Kunth, formerly Hyacinthus botryoides Lin., and Muscari botryoides Mill; the blossoms of this are small, oval, deep blue and closely aggregated into bunches resembling somewhat miniature grapes: this species is also found in abundance, and it possesses when first gathered a peculiar plum-like odour. A third kind is Leopoldia comosa Parl., formerly Hyacinthus comosus Lin., and Muscari comosum Mill; it is distinguished by the tuft of abortive blossoms crowning each stem, by the sparseness of the flowers, and by these after a time turning from blue to brown; it is of much less frequent occurrence. The fourth kind I have met with is Bellevalia romana; this is a very singular looking flower and by no means so pretty as those previously referred to; the blossoms closely crowded on the bluish stem in a pyramidal form are of a whitish

colour shading into dull blue or green at the top. This species is only occasionally met with.

About the same time the Anemones appear; of these there are several species and many varieties, but most of the forms found in the neighbourhood of San Remo, notwithstanding the diversity of their colour and appearance, resolve themselves into two species. One is Anemone coronaria L., the flowers of which are formed of large sepals; there are six principal varieties:—1, with scarlet flowers; 2, blue; 3, purple; 4, white and pink or rosy-coloured at the base; this latter variety is small, rather rare and sometimes called Anemone rosea; 5, yellowish white, tinted red at the base of the sepals or entirely white; 6, rose violet or white, à l'onglet violacé. The four first varieties are common, but I have not myself met with the last two. The second species is Anemone hortensis, the sepals of which are much narrower and hence more numerous than those of the former species; there are two chief varieties found at San Remo, one single and of a beautiful light mauve colour; this is sometimes called Anemone stellata; in the other, named A. pavonina, which may be either single, partly double, or double, the sepals are of a brilliant scarlet, yellow near the base on the inside, a circular disc being thus formed, while in the double flowers the sepals are green on the outside: this latter variety is sometimes called by the natives 'Marguerite,' but the true Marguerite is a Chrysanthemum, as already mentioned. We must not forget to notice amongst the Anemones the beautiful blue A. hepatica, also called Hepatica triloba, which is found abundantly on Monte Bignone and some of the highest mountains, a pink variety being also occasionally met with. As was the case with the Violets, immense quantities of Anemones are gathered in the valleys and woods around San Remo, and daily offered for sale in the town.

Other flowers which come into blossom in quick succession are different kinds of Narcissus, Tulip, Iris, and Gladiolus.

Of the Narcissus there are several species, that most

commonly met with and which is to be found profusely scattered through most of the valleys is the very pretty species with golden yellow flowers, Narcissus Italicus Sims; another yellow but rare kind is N. biflorus; other kinds occasionally found are the very handsome white N. papyraceus Gawl and N. niveus; other species are N. Panizzianus Parl., N. Tazzetta, and N. Remopolensis; the latter was regarded as a variety of N. Tazzetta until its claims to a specific rank were established by the Cav^e. Francesco Panizzi, to whom I am greatly indebted for the names of very many of the flowers I have met with in my various walks and excursions around San Remo and indeed along the whole of the Western Riviera. The Narcissi above named by no means include the whole of those found at San Remo; photographs of other kinds are included in 'La Flora Sanremese Fotografata,' of Signor Pietro Guidi, and by these they can be easily identified.

The Tulips chiefly seen are of two species: the first which comes into flower is of large size and brilliant scarlet colour, Tulipa præcox Ten.; this is followed a little later by the very elegant Lady Tulip, distinguished by its white colour and broad pink band running down the outer surface of the petals, T. Clusiana DC. Of the Iris there are at least three species, one of these being Iris Florentina L., the others are I. pseudo-acorus, and I. Germanica.

The only species of Gladiolus I have come across is Gladiolus communis; this does not usually flower until the beginning of April, it then makes its appearance for many miles round San Remo in vast quantities, and being of a very beautiful magenta colour, it forms one of the most conspicuous and attractive of the many flowers which at that season everywhere so abound. Another species sometimes met with is G. segetum.

Another spring flower which deserves a separate notice is the Star of Bethlehem, Ornithogalum umbellatum; the blossoms of this are remarkable for their pure white colour, and are distinguished by the outer surface of the petals being careened with green.

Several species of the genus Allium grow around San Remo in great abundance; one of these is Allium nigrum, characterised by its broad tulip-like leaves and large umbel of pinkish flowers. But the species which attracts the most attention and which is met with in some localities in the greatest profusion is A. Neapolitanum Cyr., A. album L. This is a particularly graceful flower, especially when it first comes into blossom; it is of the purest white, and from its beauty and abundance it is much used in bouquets and in Easter church decorations; the only drawback is its smell, and it has been found that this is removed by plunging the stems into boiling water. Other species which grow in the neighbourhood are, A. triquetrum L., A. roseum L., A. subhirsutum L., and A. trifoliatum, all of which have been photographed by Signor Guidi.

In such profusion does the Allium Neapolitanum grow in many districts that the ground is whitened with the blossom. Another wild plant, which though far less beautiful also helps to produce the same effect, is the common white scurvy grass, Cochlearia draba.

Early in April a very striking looking Arum comes into blossom, A. Italicum; its sheath is very large, nearly white, and when of its proper shape this Arum is really very handsome; but the sheath after a time is apt to lose its form and the plant consequently its chief attraction. It occurs very commonly in cultivated but unused ground.

Among the Thistle tribe there is one which by its beauty and abundance, particularly in and around San Remo itself, challenges observation, Galactites tomentosa Gaertn.; this is at once distinguished by its green and white denticulated leaves and by the pale mauve colour of its flowers.

Other plants which cannot be passed by without a brief notice are, Ficaria ranunculoides Mœnch, formerly Ranunculus Ficaria L., which conspicuous for its green leaves and large yellow shining blossoms grows in great perfection in the valleys in damp situations near the streams; the curious Umbilicus pendulinus DC., so common on stone walls, to which it gives verdure by its large round

shining green leaves; the very beautiful malvaceous mountain plant with its pale pink blossoms, Lavatera punctata; the nearly equally beautiful but less rare Convolvulus althæoides, which resembles the Lavatera somewhat in its general characters; the Cyclamen-like plant, Erythronium Dens Canis L., with its flesh-coloured upturned petals, met with so plentifully on the top of Monte Bignone; the very pale blue Periwinkle, Vinca minor; and last but not least the elegant Caper plant, Capparis spinosa, which although a tropical plant, here ripens its fruit freely.

The family of the Orchids is particularly well represented on the Riviera and in the neighbourhood of San Remo. The handsome Bee orchis is found in such large quantities that bunches of it are often seen in the baskets of wild flowers carried about by the children, as is also sometimes Barilla longibracteata Parl. Signor Guidi has photographed most of the kinds met with.

In such profusion do the various kinds of wild flowers grow in the valleys and on the hills around San Remo, that they are daily sold in the streets; from the beginning of January until nearly the end of April the flowers are made up into hundreds of tempting little bunches and the air of the Esplanade is frequently perfumed with their scent. In no other place have I ever met with wild flowers in such quantities and of so many kinds. Occasionally the roots are dug up with the flowers and offered for sale; this practice is of course strongly to be condemned, and should be discountenanced as much as possible. It is to be feared that the wholesale way in which the wild flowers are gathered, rendering their seeding impossible, will ere long seriously affect the supply, but the removal of the roots will be fatal.

The extreme dryness of the climate of the Riviera more particularly during the summer, rain often not falling for months together, influences greatly the character of the vegetation. Those trees and plants thrive best which throw out the strongest and longest roots, whereby they are enabled to supply themselves with the necessary

84612

moisture from the soil, and which also part with the moisture so obtained with the least facility by evaporation from the leaves. Thus the Aloe is not only remarkable for the depth to which its roots penetrate but for the density of its epidermis: the leaves of Evergreens in general, having also a dense cuticle, retain their moisture much longer than do those of deciduous trees, and hence are enabled to sustain drought for a longer period, and in this fact we are furnished with one of the reasons why the vegetation of the Riviera is principally evergreen.

The epidermis of many Cacti is so thick that these plants also lose their moisture only with difficulty, and hence they are particularly adapted to a sandy dry soil and hot atmosphere. Another class of plants which grow freely in the Riviera and resist for a long time the effects of drought, are the Euphorbiaceæ, but this for a different reason; the juices of these plants are thick and form an emulsion which contains a kind of indiarubber, and hence they dry up much more slowly.

As might be supposed, from the many rocks, bridges, aqueducts, and stone walls near San Remo, Ferns abound. One of the kinds most commonly met with is the elegant, and with us much prized Maiden Hair fern, Adiantum Capillus Veneris, called by the Italians 'erba della fontana;' an infusion made from its leaves is sometimes drunk as tea. Other ferns which are also very abundant are the common Maiden Hair Spleenwort, Asplenium Trichomanes, known by its delicate narrow fronds and opposite oval leaflets, and the Scaly Spleenwort, Ceterach officinarum, distinguished by the brown chaff-like scales and curled extremities of the fronds. Kinds less frequently seen are, the Black Maiden Hair Spleenwort, Asplenium adiantum-nigrum, and the variety of this, sometimes called the Acute Spleenwort, A. acutum Pollin., and the common Polypody, Polypodium vulgare. In damp situations, specimens of the very pretty Lycopodium denticulatum are also met with.

But a great many other flowering plants and shrubs are encountered in the rambles around San Remo in addi-

tion to those which have already been referred to; the following I have myself found. Oxalis hybrida, O. corniculata; Königa maritima; Odoastrum rubrum; Urospermum Dalechampii Desf. with its large pale yellow blossoms, and Pyrethrum Myconis Mœnch, with its rich yellow flowers; Cineraria maritima; Globularia Alypum and G. vulgaris; Pulmonaria angustifolia; Symphytum tuberosum; and Omphalodes verna Mœnch; the last three belonging to the Borage family: the Samphire, Crithmum maritimum, which belongs to the Crassulaceæ, many curious and rare species of which are to be found flourishing on the rocks near the sea and on the mountains; Crocus vernus and C. versicolor; Scilla maritima and Nectaroscilla hyacinthoides. In addition to the plants which have been already mentioned I have found many others; the principal of these are referred to in connection with the localities where they were met with.

Such is the dryness of the climate that very many deciduous and delicate shrubs and flowers are unfitted for it, or grow only during the moister periods of the year, or, in the summer, when constantly watered, and as the process of watering at that season is in most cases laborious, and hence costly, some plants are either not cultivated at all or are allowed to die in the summer, to be replanted again in the autumn. This is the case with the grass forming the lawns in the grounds of many villas at Cannes, the grass seed being sown afresh each winter season.

But not only do flowers and small shrubs require to be kept constantly watered in the summer, but even the Lemon and Orange trees, especially the former. Now fortunately the means exist whereby this may be accomplished without too great expense, especially in the neighbourhood of San Remo. As has already been stated, a stream runs through each of the several valleys which lie east and west of the town, and these streams are made to supply innumerable reservoirs and tanks, the water being distributed from these by means of small aqueducts to all the low-lying lands, which can thus be irrigated whenever necessary.

Where streams do not exist the tanks are filled from wells. In the neighbourhood of Cannes, partially sunk in the ground, huge vase-like jars are frequently seen; these are employed for the storage of water or manure; but the same description of jar is also used for olive oil. These jars resemble in size and form exactly those which I have seen on the stage in the pantomime of 'The Forty Thieves;' it was doubtless in precisely similar jars that those redoubtable thieves were concealed, and in which they met their well deserved fate.

The evidences then of the extreme mildness of the winter climate of the Riviera and particularly of its more sheltered parts derived from the Flora are numerous and may be thus summarised. 1. The fact that many plants which in England would be surely killed, live here throughout the winter in the open air. 2. That they not only live and grow, but many of them blossom freely during the whole winter. 3. That some plants which in England and other countries having a similar climate are annuals only and attain but small size, here become perennials, growing even into shrubs. 4. The growth in the open air throughout the winter of many plants and flowers which with us can be preserved only in greenhouses or even hot-houses. 5. Notwithstanding that the leaves fall off and the blossoms are injured by one or two degrees of frost; that the fruit falls off at 5° and the tree itself is killed at about 8° of frost, the Lemon tree grows and flourishes here through a long series of years without being killed or even seriously injured. 6. That the Flora of the Riviera includes as we have seen numerous trees and shrubs of a semitropical character, as many kinds of Palms and Bananas; the Orange, Lemon, Pomegranate and Olive trees; the Carouba or Locust tree; Pistachia Lentiscus; Terebinthinus Chio; the Oleander; Myrtle; Caper plant; the Aloe; the Prickly Pear, and the bush-like Euphorbia. All of these grow freely without artificial protection of any kind.

Having brought this somewhat rapid sketch of the vegetation of the Riviera to a close, some fuller particu-

lars may now be given of a few of the more important and characteristic trees. The first to be noticed is the Olive tree, since it is the most conspicuous and abundant of them all, it claiming the hills and valleys for its own. Although the Olive tree has taken possession of the Riviera, it is really a native of the Holy Land, but it has evidently found here conditions of soil and climate not less favourable than those of its own country.

The Olive tree, Olea Europea, is an evergreen of slow growth, attaining under favourable conditions the size of a forest tree and flourishing for many centuries. The mode of growth is singular; the younger trees usually consist of a single trunk which divides at a short distance from the ground into two or three primary branches, and this trunk is often irregularly twisted and contorted. When the tree has attained any considerable size, the interior frequently decays and the outer part of the trunk with the bark becomes split up into two or three segments; the bark then gradually encircles the separate portions until each becomes coated all round and several stems are thus formed out of the original single trunk. Why the inner portion of the tree should be so prone to decay is not very apparent, but it may be caused in some cases by the admission of moisture through the numerous fissures and holes in the bark; these extend some distance into the substance of the tree, and from their number one would be led to suspect that many of them are the work of some boring moth. This splitting up of the tree into smaller trunks and the forms thus assumed are often very singular.

The roots are very large and massive; they spread round the tree for a considerable distance, and some of them penetrate deeply in search of the nourishment which is contained but sparingly in the soil in which the Olive trees grow. Now this breaking up of the original trunk is probably materially aided by the extension outwards of the roots, which draw the lower portion of the trunk with them and so help to split it up. But there is still another way in which the trunks are multiplied, and which contributes in many cases to their singular appearance.

From the roots which lie so thickly spread round the trunk, and which are often partly above the surface of the ground, spring up numerous shoots, some of which being suffered to grow, attain at length the size of secondary trees; and thus one Olive tree in time often possesses several trunks. The leaves of the Olive tree are long and narrow, dark green on the upper and silvery grey on the under surface, the young shoots presenting also a silvery appearance. The leaves resemble closely those of the willow, to which indeed the whole tree bears some resemblance. It puts forth its small axillary and pretty clusters of yellowish white blossoms, usually in April; it begins to ripen its fruit about October; the berries are at first green, afterwards of a plum colour, and finally almost black, with a rich bloom; when ripe they begin to fall off the trees, and great numbers of women and children are employed in picking them up, carrying the baskets filled with them at the end of the day to the olive mills. The picking up of the olives at San Remo sometimes extends far into the spring, the period varying in different years according to the weather, the greater or less abundance of the crop, and the freedom of the olives from the attacks of an insect which lays its eggs in them and to which they are particularly liable. When once the olives have fallen from the trees the sooner they are picked up the better, as if they are allowed to remain on the ground and especially if rain falls on them, they acquire a taste of earth and grass, and the quality of the oil is thereby injured. In good olive years men climb up into the trees and beat the branches with long poles, the olives falling on to cloths spread beneath the trees; the oil extracted from these olives is of the best quality, being free from all extraneous taste.

The olive crop is very uncertain, and it is reckoned that a good one is only obtained on an average once in three years, and in order even to insure this, it is necessary that the tree should be regularly pruned and well manured. Every year the earth is dug up about them, and once in three years a trench is made running partly round the tree,

but at a little distance from it; into this the manure is put. This consists of almost any description of animal and vegetable refuse, but old woollen rags are considered to be the best, and the fouler and dirtier they are the more suitable they are deemed for the purpose. The collection of these rags and their importation into the olive districts constitute a regular trade.

The trees appear at their worst after they have been beaten to obtain the berries, and when they have been pruned; it is in winter that they are seen to most advantage, when the foliage is thickest and freshest; but they also look particularly well in the spring after they have put forth their new shoots and are in blossom.

Although the Olive is much hardier than the Orange and Lemon tree, it bearing a frost of about 15° without being killed, a warm climate, such as that of the Riviera, is yet necessary to the production and ripening of its fruit. Some years since I had a small Olive tree planted in a very sheltered position in the grounds of the Royal National Hospital for Consumption at Ventnor. It grew rapidly and blossomed freely in the spring, but I never saw more than one green olive upon it; at the end of three or four years it had attained a considerable size, although it was never manured or specially protected in any way except during very severe weather in winter.

The process of obtaining the oil is as follows, and for most of the particulars I am indebted to the kindness and practical knowledge of M. Alexandre Escoffier of San Remo. The olives are sold by the grower to the manufacturer and are carried to the mills by the women who collect them; the mills are usually situated for the sake of water power in the course of the streams which flow through the valleys. The olives are strewn on the floor, the different days' gatherings and qualities being separated by boards placed edgeways, and the sooner the olives are pressed after they are collected the better the oil. The olives are next reduced to a pulp by means of a revolving stone, an operation which takes from 3 to 4 hours; the pulp is then taken out of the mill and put into

circular bags termed 'exportins,' having a large hole at top and bottom and made of a very tough kind of fibre worked in meshes like a net; these when filled are placed one on top of the other, to the number of 10 or 15, under a press which is almost always worked by hand. A portion of the oil escapes from the pulp before any pressure is applied, and this is called 'virgin oil;' that produced by pressure is mixed with the water naturally contained in the olive, and the expressed liquid must consequently be allowed to stand for some hours that the oil may rise to the surface; this oil is called 'huile de seconde,' and is not so good nor does it keep as well as the 'virgin oil.' It should be understood however that unless special orders from the merchants are received to the contrary, the manufacturers do not keep them separate; they are mixed together at once. After the olives are pressed the pulp is placed in large pits called 'fosses à ressences,' where it is left to be used, two, three, even six months later; or it can be immediately placed a second time in the mill, the oil to be extracted by the 'cold process' as it is called; the mill is set going and a stream of water continuously poured on the pulp, the water and pulp being carried away by a siphon into five or six receptacles all communicating with each other. The stones of the fruit of course sink to the bottom, the pulp and any parts containing oil rise to the surface in these receptacles; this is all skimmed off and the pulp once more placed in the 'exportins,' which however are of a much closer make than those first used and are called 'spagnolettes.' They are subjected to pressure as before, and an oil is obtained which is used for burning and also for greasing of machinery.

In case the manufacturer prefers to wait for some months, the pulp before being put under pressure is placed in a large caldron with one third the quantity of water and boiled for several hours; the contents of the caldron are then put into the 'spagnolettes,' which are pressed and a very thick and greasy oil procured; this after being allowed to stand for a long time divides into two qualities: the upper portion has a bad smell, is often green, very

limpid, and is used for machinery and in cloth manufactories; it is more valuable than the other quality or lower portion, which is only used in the making of soap. The pulp that still remains from this last process is sold to the manufacturers of sulphuric acid, who by the aid of this and hydraulic pressure produce an oil which in the trade is known by the name of 'sulphur oil;' soap is also made from this. The stones of the fruit are sold for fuel to heat ovens and for steam machinery.

The water from the pulp contains much of the colouring matter of the ripe olive and is stained a deep red; sometimes this is collected in receptacles to allow of the subsidence of a residue which is used as manure, at others it is discharged directly into the streams. The olive oil of San Remo is of excellent quality and commands a good price in the market. The olive crop is not so profitable as that of lemons and oranges, yet should the trees be once destroyed it would take generations to replace them; moreover they are usually planted so as to allow of the cultivation, especially in the valleys, of various other trees, including the Vine, Orange, and Lemon. A destruction of Olive trees is however constantly going on in the neighbourhood of San Remo and other towns in the olive districts, either with a view to the clearance of the ground for building purposes or to the removal of old and decayed trees; even these when cut down are still very valuable, since they furnish, especially the roots, nearly all the wood used for burning, it constituting, with the exception of the small quantity of charcoal employed in cooking, the chief fuel of the country.

The wood of the Olive being somewhat hard, of a warm yellowish tint and pretty grain, is also much used for the manufacture of various kinds of ornament; some of these being beautifully inlaid.

Some persons do not admire the Olive tree, and think its foliage sombre, and those who have only seen the smaller and scattered trees which occur between Marseilles and Cannes may well feel some degree of disappointment at the appearance which they present. The Olive tree is only

found in perfection along the Riviera proper, and especially in and around San Remo and for some miles to the east and west of it. Here the trees are large, lofty, many of them very ancient and thickly planted, and extending from the verge of the sea through the valleys and up the sides of the protecting hills for miles to an elevation in some cases of nearly 2000 feet, giving to the hills and valleys their soft, dark-green and silvery vegetation.

Anyone who has seen Olive trees as they grow at San Remo, and who has wandered through the Olive groves and over the Olive-clad hills, will, I am sure, no longer regard them as sombre, monotonous, and uninteresting, but will be struck with the singular variety of forms which they present, their soft and not too obtrusive green colour, and the modified screen which they afford from glaring light, too strong sunshine, or stormy winds. Although at a distance the hills appear to be densely covered with Olive trees, yet on walking amongst them we find that there are considerable intervals between the trees, so that while they form a screen they yet admit an abundance of light, air, and sunshine. In fact they afford exactly the kind of shelter best adapted for the invalid in his walks and rambles.

The next tree to be specially noticed is the Lemon, Citrus Limonum; of this there are several species and varieties, as there are also of the Orange, and although the Citron is sometimes met with in the Riviera, it is the ordinary kind of Lemon which is there chiefly cultivated.

The Lemon tree is distinguished by the somewhat sparse habit of its growth, its few and straggling branches, the paucity of its light-green leaves, and by the curious fact that it blossoms all the year round, even in mid winter, and that it consequently bears fruit in all stages of development, from the scarcely formed and green condition up to the pale-yellow and ripe fruit. It is in these circumstances that we find the explanation of the fact that the Lemon is not nearly so effective and handsome as the Orange tree presently to be noticed. Still although not

so beautiful as a rule, yet when seen in perfection and bearing a crop of ripe lemons it presents to us Northerners a sight at once novel and interesting.

The Lemon is a very delicate tree, the blossoms and leaves are injured by a very slight frost, the fruit falls off, as already stated, at 5° and the tree is killed at about 8° or 9° of frost. The exact temperature however at which the fruit and trees are injured varies according to the state of the atmosphere as to moisture and dryness and the amount of radiation going on.

The existence therefore of Lemon trees in considerable numbers, these growing without any special protection and reaching a size only to be attained in the course of some twenty or thirty years, affords unmistakable evidence, not only of the mildness of a climate, but of its comparative uniformity from year to year.

The Lemon, unlike many of the trees which grow and flourish in the Riviera, does not bear drought, but requires frequent watering, and hence the most congenial situations for its growth are the numerous valleys, each watered by its stream, which exist around San Remo and in a limited district which may be said to be bounded on the one side by Mentone and on the other by Taggia. It is in excursions up these watered and sheltered valleys that the Lemon tree is principally met with and where it is profitably cultivated. The light green of its foliage contrasts so strongly with the softer and darker green of the Olive as to make it at once apparent that if the valleys and hills were as thickly studded with Lemon as they now are with Olive trees, the eye would quickly become fatigued with the brightness of the colouring.

The growth of the Lemon is quite as dependent upon a plentiful supply of water as on the mildness of the climate and protection from frost; Lemon trees are therefore not found in many situations otherwise suitable, in consequence of the absence of a due supply of water.

In the town of San Remo a great many Lemon trees have of late been removed, and the process of removal is

still continued to make room for the erection of houses, and there are not now, therefore, nearly as many trees as formerly.

The lemon is a much more remunerative crop than the olive; the price of course varies with size and quality, but the best lemons usually fetch from 20 to 30 francs per thousand.

The difference between lemons bought in England and those which we get here freshly gathered from the tree is very great; the lemons, even when gathered green, as they very often are, are much more fragrant and pleasant to the taste than the imported lemon. Neither the cook nor the pharmaceutist could dispense with its juice or the grateful essential oil of the peel of this most valuable and wholesome fruit.

The kindred tree upon which a few words may next be bestowed is the Orange tree. Who in his youth has not pictured to himself the beauties of an Orange grove, and longed to behold all its loveliness!

Unlike the Lemon, the Orange tree is distinguished by the regularity of its growth, the closeness of the branches, and the abundance and density of its dark-green foliage, in which the golden fruit lies half buried and concealed. Few spectacles can exceed the beauty of a grove of large and well-grown Orange trees laden with their abundant crops of ripe golden oranges, such as are to be found during the winter in the valley of Taggia within a short distance of San Remo; as there seen the picture formed in childhood of its beauty is far surpassed.

The Orange tree blossoms once only, in the early spring, usually in the month of February, the whole air in the neighbourhood of a group of trees being then perfumed with the scent; it of course bears but one crop of fruit, which begins to ripen and to assume its characteristic golden tint in the autumn and early winter. It is at this time that a large proportion of the oranges are gathered for sale, but the quality of the fruit improves greatly by its being kept on the tree for some months longer, until April or May. It is stated that a tree in full

fruit will produce as many as from 4000 to 6000 oranges.

The Orange tree is less delicate than the Lemon, the fruit bearing about 7° and the tree 11° of frost.

On the whole, the orange, especially if we include the several species and varieties embraced under the name, must be pronounced even a more valuable fruit to man than the lemon; what more grateful drink than the juice of its ripe fruit? what more agreeable preserve than that of the bitter orange? what lighter or pleasanter tonic than the infusion made from bitter orange peel? and what more acceptable perfumes than those prepared from its flowers? especially the essence or Neroly so much used in the making of Eau de Cologne.

Amongst the trees deserving of special notice is the Blue Gum or Eucalyptus Globulus, belonging to the natural order Myrtaceæ. The Eucalyptus is an evergreen, blossoming freely, and producing in abundance its curious bronze-like and urn-shaped fruit or seed; the flowers, which are large and resemble closely those of the Myrtle, as well as the fruit, may be seen on most of the larger trees throughout the winter. The difference of appearance presented by the young and older trees, especially in the form of the leaves, is very singular; in the young tree the leaves are light green, opposite, sessile, ovate, and coated with a bluish bloom, from which circumstance, no doubt, the familiar name of Blue Gum is derived; but the leaves of the older trees are long, stalked, twisted or scimitar-shaped, thick, and of a dark-green colour. The Eucalyptus sheds its rich cinnamon-coloured and fragrant bark freely in very large pieces, which may be often seen hanging from the trees in strips. The Eucalyptus is remarkable for the large quantity of a volatile oil which it contains; this possesses a fragrant and balsamic odour and abounds in every part of the tree, the leaves emitting the odour strongly when bruised; indeed, this is evolved naturally in some cases to such an extent as to scent the air near the trees.

Now, this volatile principle is a source of ozone like

the resin of the Fir tree, and it possesses powerful medicinal properties; hence the Eucalyptus Globulus in various forms is now becoming employed in medicine. A liqueur is prepared from it at Marseilles, termed Eucalypsinthe, which is extensively used in France and which is specially recommended on account of its calmative properties as a substitute for that pernicious and nerve-destroying compound, Absinthe. Specimens of Eucalypsinthe prepared by the firm above alluded to were exhibited as the Paris Exhibition, one of which I examined. It possessed strongly the odour of the Eucalyptus, and a small quantity added to water caused the mixture to become of a milky colour from the deposition of the oily and resinous matter contained in it; the flavour was however anything but agreeable, and it is difficult to understand how anyone could be brought really to like it as a beverage, though they might take it as a medicine. The Eucalyptus is credited with febrifuge properties; these, some would assign to the volatile oil it contains, and to the action of this as an ozonizer, while others with more reason attribute its beneficial effects to its drying up, by the rapidity of its growth and the abundance of its evergreen foliage, the damp marshy and even malarious soil in which it is frequently planted.

Another of the more noticeable of the trees which abound and flourish so luxuriantly in San Remo and the neighbourhood is the Pepper tree, Schinus molle. This often attains considerable dimensions; there is a very large specimen in the garden next to mine, that of the English Chaplain, the Rev. G. L. Fenton, and this, although of the size of a forest tree, yet appears to be full of life and vigour. The Pepper tree is especially remarkable for the delicacy and elegance of its compound leaves and the large bunches of coral-like berries. When unripe the berries are green, and it is no unusual circumstance in the autumn to see the blossom, which is comparatively small and insignificant, and the green and ripe berries together on the same tree; the berries are pungent and have very much the taste of those of ordinary pepper.

In the month of October the Pepper trees are laden with their ripe berries, and are then seen in the height of their beauty.

That curious plant the Prickly Pear, Opuntia vulgaris, is made up of a series of oblong pieces or sections which are attached to each other by their extremities. The several sections resembling each other very closely in form and size, and being so united, impart to the plant a very formal and curious appearance, the arrangement reminding one of some gigantic coralline. The new sections grow from the extremities of the older ones, and it is from the distal edges of these that the blossoms spring which afterwards bear the peculiar fruit known to most English people, as it is not unfrequently seen in fruiterers' shops in London. The Prickly Pear blossoms freely in the months of May and June, and if in a favourable situation, it bears an abundant crop of fruit, which it ripens early in the winter. There is in my garden at the present time a Prickly Pear which has attained some 10 or 12 feet in height, and on which I counted considerably over a hundred 'pears;' these are sometimes called here 'figues des Indes' and 'poires d'épines;' one section alone often bears as many as twenty specimens of the fruit. When ripe the pears are of a bright and almost vermilion colour on the side exposed to the sun, and from their surface spring bunches of spines disposed in geometrical order. They contain a deep reddish-yellow pulp with numerous seeds; this is cool and refreshing, but the pears I have tasted possessed but little flavour. It is necessary to be very careful in handling the fruit of this cactus, not only on account of the thorns above referred to, many of which drop off before the fruit becomes ripe, but because from the spots where the larger thorns spring, there also issue innumerable hair-like prickles, which are so exceedingly minute as to escape observation and which readily pierce the skin, giving rise to a good deal of irritation.

The following quotation from the work of Dr. Panizzi, entitled 'San Remo e il suo Clima,' will form an appro-

priate conclusion to the foregoing description of the vegetation of the Riviera.

'The vast extent of soil between San Remo and Ventimiglia is full of plants which present a true indication of our mild temperature. One may in vain search beyond these limits for such hardy specimens of the Date Palm, which, though its fruit seldom ripens here, rises proudly feathering to the height of 20 yards or more. The "Circuit of the Palm trees" was the name given at the close of the last century by the Ligurian Republic to this tract of country, which is so strikingly distinguished from the rest of Italy.' By some authors San Remo is described as the 'Garden of the Western Liguria' or Riviera, as Nervi has been styled the 'Garden of the Eastern Riviera.'

It has thus been shown that the Vegetable kingdom affords abundant evidences of the mildness of the climate of the Riviera, especially its more sheltered portions, as San Remo and Mentone. But the Animal kingdom likewise furnishes proofs of the same fact, only that these are less patent and not so generally known.

Thus evidences are furnished by the Feathered tribe. But on this point I will cite the authority of an accomplished ornithologist, Signor Benedetto Musso, whose valuable ornithological collection will be found more particularly referred to in the account given of Laigueglia and Alassio. He states that, of the kinds of Birds which are stationary in the Western Riviera during the spring, summer, and autumn, there is not one which leaves in the winter, and that this suffices to show that they can find but very little difference between the winter and the other seasons: that the Martin, Hirundo urbica; the common Swallow, H. rustica; and the Crag or Rock Swallow, H. rupestris, which are on the passage in spring, and which remain until the autumn, are seen in some parts of the Western Riviera to prolong their stay throughout the whole winter: that in winter, and particularly on the colder days when snow falls on the Alps, the Apennines, and even in Corsica and Sardinia, and most frequently in the last case, although these countries are situated much further south,

we see an immense quantity of Birds arrive there, either of the kinds which are stationary or of those seen only on the passage in spring and autumn, the latter having returned hastily to our Riviera to enjoy our mild climate. Among these pilgrims, which come to us in search of warmth, and which at certain periods cover the country in vast numbers, may be mentioned the following. The Redbreast, Sylvia rubicola; the Wren, Sylvia troglodytes; the Alpine Warbler, Accentor alpinus; the Warbler, A. modularis; the Stonechat Warbler, Saxicola rubicola; the White Wagtail, Motacilla alba; Grey Wagtail, M. boarula; the Redwing Thrush, Turdus iliacus; the Fieldfare Thrush, T. pilaris; the Song Thrush, T. musicus; the Missel Thrush, T. viscivorus; the Ring Thrushel, T. torquatus; the Blackbird, T. merula; the Solitary Thrush, T. cyanus; the Wood Lark, Alauda arborea; the Skylark, A. arvensis; the Crested Lark, A. cristata; the Cirl Bunting, Emberiza cirlus; the great Titmouse, Parus major; the Lorrain Bunting; E. Cia; the yellow Bunting, E. citrinella; the Goldfinch, Fringilla carduelis; the Chaffinch, F. cœlebs; the Linnet, F. cannabina; the Bramble Finch, F. montifringilla; the Grunling, F. chloris; the Bullfinch Grosbeak, Pyrrhula vulgaris.

Notwithstanding that the Birds above enumerated are described as pilgrims, yet it must be understood that many of them, as the Finches, are also stationary and build their nests there, in the Riviera. Although many birds are driven to the Riviera in winter by stress of weather, it is in the spring and autumn that they arrive there in the greatest numbers; at the former season they are on their way to their summer quarters, which lie far northwards, and in the autumn to their winter habitations, which are much further south than the Riviera. In the summer, birds are comparatively scarce; this arises from the fact that they can then obtain only a limited supply of water and food, owing to the warmth of the climate and the comparative absence of rain during that season. Among remarkable birds met with near the coast are the Golden Oriole, the Huppoo, some handsome Woodpeckers, and the Bee-eater.

Other proofs of mildness of climate are afforded by Fish; many of the Mediterranean kinds resembling those of tropical seas in the beauty and brilliancy of their colours. Some of those often seen in the market are of a deep blue, vivid green, or bright scarlet; others are marked with stripes of vermilion or gold, and some are variegated, presenting all the colours of the rainbow.

The extraordinary depth of the Mediterranean serves to modify in a very singular manner the structure of some of the fish which inhabit it. Those fish which live in deep water, where light only partially penetrates, are remarkable for the large size of their eyes, while those which are found only at the greatest depths, which scarcely a ray of light reaches, have eyes very imperfectly developed, thus affording a striking example of adaptation to particular ends. The fish which inhabit the deeper water have need of eyes which enable them to utilise the limited light that is there found, while those which live in darkness have but little need of eyes at all.

The class of Reptiles affords equally striking evidence of mildness. In England and other countries with a similar climate, most of the members of this class lie concealed during the winter months in a state of torpor or hybernation, but here they retain, especially the Lizards, their wonted agility, every wall and bank when the sun is shining being literally alive with them. It is very amusing to watch the Lizards; in the winter they do not stray far from their homes, usually holes or fissures in rocks or walls to which they immediately retreat on the approach of anyone, but as the spring advances and insect life becomes more abundant, many of them forsake their winter haunts altogether and are often to be seen on the trunks and branches of trees, or on the leaves of plants, searching or lying in wait for their food, which consists almost entirely of insects. In the tribe of Reptiles are many curious species not met with in England. I must not omit to mention the pretty green Tree Frog, the croaking of which in the spring, in damp places and near water, sometimes persistently carried on through the

night, is something really astounding and quite sufficient to put sleep to flight.

Then lastly, the Insect tribe abounds throughout the winter. As many kinds of flowers, which in a less favourable climate are annuals, here become perennial, so the lives of many insects are greatly prolonged. Indeed it would seem that the death of many butterflies in the winter in the Riviera is due not so much to any fixed limit of age or to severity of weather, as to the failure at that season of the supply of flowers on which they are accustomed to feed. This prolongation of life occurs not only with some species of Butterflies and Moths, but also with the ordinary house Fly, the detestable Mosquito, and many other insects. Even during the past winter, 1878–79, so remarkable for its severity, Butterflies were to be seen in great numbers on every sunshiny day. Up to the middle of October they were much more numerous here than they are in the summer in England, and to the end of November they were still abundant. During December and January the kinds chiefly met with were the Painted Lady, Pyrameis Cardui; the Red Admiral, Pyrameis Atalanta; and the Humming-Bird Hawk Moth, or Macroglossa stellatarum; but the Clouded Yellow, Colias edusa, and Speckled Wood, Pyrarga Egeria, were also found until late in the winter. At the end of February the new year's butterflies began to appear, the first noticed being the small Garden White, Pieris Rapæ; the large Garden White, Pieris Brassicæ; the Pale Clouded Yellow, Colias hyale, and the beautiful pale-yellow or brimstone coloured species Rhodocera Rhamni; later on the still more handsome Swallow Tail, Papilio Podalirius, made its appearance, and by the beginning of April Butterflies were seen in great numbers, and particularly the Painted Lady. For a further notice of this species the reader is referred to the description of the valley of Ceriana.

When I left England in the middle of October 1878, there was scarcely a Butterfly to be found, but as soon as the Riviera was approached countless numbers were seen from the windows of the railway carriages; the rush of air

created by the passage of the train rendering them partly unable to control their flight, they were carried along as though they were pieces of coloured paper. On quitting San Remo at the end of April Butterflies were swarming everywhere, but on reaching England again, scarcely a single specimen was anywhere to be met with.

The specific names of many Butterflies are derived from certain plants, and the reason of this is curious; they themselves do not feed upon these plants, but instinct teaches them to select those upon which to deposit their eggs best adapted for the food of the young caterpillars. Thus, not to go beyond the species already mentioned, the large Garden White derives its scientific or Latin name, Pieris Brassicæ from depositing its eggs upon the cabbage; the Painted Lady, Pyrameis Cardui, from laying liers on the Thistle; and the Brimstone, Rhodocera Rhamni from selecting for its eggs a species of Buckthorn; and so on.

But not only may evidence be gathered of the unusual mildness of the climate from the longevity of Butterflies, and their non-hybernation, but likewise from the fact that species of Butterflies and other Insects are met with unknown to colder latitudes. On this point the following remarks by Dr. Onetti, may now be quoted.

'If, as we have said above, the vegetation and the kinds of plants afford incontestable proof of the mildness of our climate, the presence of certain insects peculiar to warm climates will furnish another palpable demonstration of the same fact. As evidence we would adduce, among the Lepidoptera, Poliommatus ballas; Carex iasius; Amphipyra effusa; Polia cantaneri; amongst the Coleoptera, Epomis circumscriptus; Ateuchus sacer; Cimelia muricata; Coniatus tamarixi; Lampiris Italica; and among the Orthoptera, Bacillus granulatus, &c.'

Dr. Coulon of Monaco who has specially studied the Lepidoptera of the Riviera has kindly given me the names of the following species as indicative of a southern temperature: Charaxes Jasius; Deilephila Livornica; D. Nerii; and Ophiodes Tirrhæa.

Another evidence of the warmth of the climate is

furnished by the prevalence of Mosquitoes in all the towns of the Riviera, including San Remo. On arriving there in October they are sufficiently abundant to be a source of very considerable annoyance; some of them even survive throughout the winter, especially in houses that are kept very warm, but on the arrival of spring they mostly disappear for a time. Now, although Mosquitoes most abound and are most troublesome in tropical or semi-tropical climates, they are by no means confined to them, and this fact explains in part their survival throughout the Italian winter; indeed, the area and period of their existence seems of late years to be gradually extending; thus they are now common in some parts of Germany, as on the Rhine and in Wiesbaden, and they have even reached London, where some hotels are reported to be infested with them. In Germany, where the climate is so severe, they live throughout the winter in rooms warmed by stoves, as I have myself experienced.

The Mosquito is nothing more than a species of gnat, and it resembles very much the gnat, Culex pipiens, so common in England and with the so-called bites of which we are all familiar; but the bite of the true Mosquito is far more severe in its effects. Having pierced the skin with its sharp tubular lancets, the Mosquito, vampire like, sucks up the blood of its victim, with which it becomes so gorged that the red colour is seen through its transparent body; but although a bloodthirsty little monster, one must yet give it credit for courage; it does not silently steal upon its enemy, but as it rushes upon him, sounds its trumpet-like war cry, thus giving a timely warning often sufficient to ensure its own death.

Now, although but little is to be found in books on health resorts about the annoyance arising from Mosquitoes, they are in some cases veritable pests, and produce frequently an amount of pain, disfigurement, and discomfort which it would be difficult to exaggerate, especially in the case of young persons who have delicate skins, or who are strangers to the locality, for the natives do not appear to be troubled with them to anything like the same extent,

owing, it is asserted, to their having become protected by frequent inoculation, from the effects of the presumed poison. It has not been proved, however, that the Mosquito really does secrete a poison and infuse it into the wound which it makes: it is more probable that the irritation which ensues is due solely to the depth to which the lancets penetrate, which is very considerable.

Quickly after the stab of a Mosquito, the part swells up, becomes red, smarts, a good deal of irritation ensuing; in this condition the wounds may remain for days, but the effects differ, in some cases being very much worse than others. Sometimes only a small and somewhat hard swelling takes place, showing apparently that the irritation has been limited by a process of adhesive inflammation; in others the swelling which ensues is more extensive, the skin is at first only slightly raised and of a white colour, like the sting of a nettle, but irritation speedily sets in, the white spot becomes red and the redness and swelling often extend for two or three inches around the original wound: there is always however a line of demarcation observable between the part first affected, which is always the last to lose its redness, and that which becomes subsequently involved in the mischief.

Many remedies have been recommended for mosquito-bites: ammonia, soda, vinegar, chloroform, oil of cinnamon, or of cloves, and Eau de Cologne, but I have never found much benefit to result from any of them. The treatment of these wounds has formed the subject of correspondence in 'The Lancet.' One writer regards soap as infallible, and takes great credit to himself for recommending it, but as if not quite certain of its efficacy, he advises that a bottle of strong ammonia should be placed under the sleeper's pillow, and that if bitten he should immediately apply the ammonia to the part, then get up, rub in some soap, and finally resort to the tap and allow a stream of cold water to trickle over it. A somewhat varied and trying course of treatment to carry out in the middle of the night. The soap may be useful, the stream of cold water will be so decidedly, but the bottle of strong ammonia

placed under the pillow is objectionable, because of the possibility of the escape of the ammonia and the dangerous consequences which might then ensue. In this case, as in so many others, prevention is better than cure. The beds should be provided with properly constructed mosquito curtains; it is not enough that they have curtains, for the beds of nearly all the houses and hotels in the Riviera are furnished with them, but in the majority of cases the curtains are insufficient and sometimes they even aggravate the evil. Nearly all the curtains I have seen are like those of an ordinary bed, in several pieces, and they do not nearly reach the ground, so that the Mosquitoes make their way under them, and as the curtains are usually closed at bed-time the Mosquitoes are shut in. The curtains therefore should have as few openings as possible and should rest on the ground for some inches; moreover the texture should be light and open, so as not to impede respiration.

A useful precaution in many cases is to burn one of the pastilles of Dr. Zampironi a little time before going to bed, placing it within the curtains. These pastilles consist mainly of Nitrate of Potash, and they may be used without any ill effects; I have found them nearly always to quiet the mosquitoes for the night. A very good plan is to examine the windows shortly before dusk and to kill all the mosquitoes which are often found there at that time, also to be careful to shut the windows before bringing lights into a room, as these attract the insects.

The very curious and important fact has recently been discovered, that the Mosquito is the medium of diffusing a parasite, Filaria sanguinis, which infests human blood in tropical and also in some European countries, it giving rise to several morbid conditions, and being the cause of certain diseases, the nature of which has hitherto been involved in much obscurity. The Filaria passes into the body of the Mosquito in the blood which it abstracts from man, and there undergoes a process of higher development; ultimately it becomes deposited in water together with the eggs of the Mosquito, and is thus liable when the

water is drunk to be re-introduced into the system, usually in a more mature condition.

But there are many other curious and rare animal productions, and especially insects, found in the Riviera even in the winter, in addition to the kinds which have already been noticed, such as the Scorpion, the Praying Mantis, the Trap-door Spider, the Processional Caterpillar, the Fire Fly, the huge Flying Grasshopper, Acridium testaricum, and many others equally singular. The Fire Fly, however, does not make its appearance until the end of April or beginning of May, when the effect produced by its bright but intermittent light as seen on a dark evening under the Olive trees is both interesting and beautiful. It is not my purpose, however, to enlarge on this subject, and I will bring this chapter to a conclusion with a few remarks relative to the Processional Caterpillar, founded on my own observations.

The Fir trees, in many parts of the Riviera, as at Cannes, Villefranche, and San Remo, are infested in some cases to such an extent with this Caterpillar as to become greatly injured or even destroyed. The history of this Caterpillar, so far as I have ascertained, is as follows. The Moth deposits its eggs in suitable situations on branches of the Fir tree; these in due course become hatched, and the Caterpillars begin to spin for themselves a nest round a small branch, the size of the nest varying considerably according to the number of the caterpillars, some being as large as good sized birds'-nests, hanging as it were in the tree. On examining these nests attentively, no apertures serving as means of entrance and exit can usually be perceived. I broke off a branch of a fir tree, with one of the nests upon it, and planted it in a large flower pot. Inspecting it on several occasions during the daytime, I was much surprised never to see any caterpillars outside the nest, and concluded that they were all stowed away in their little habitation. It happened, however, that one of my visits was paid to the nest at night, and then I was not a little astonished to find that the twigs of the fir were swarming with caterpillars; the following

morning they were invisible, but the next night they were again seen busily feeding; the same thing was afterwards observed to occur regularly each day and night. This observation served to make apparent much that was otherwise inexplicable; the parent of the caterpillars being a nocturnal moth, flying and feeding by night, they themselves inherit as far as is compatible with their condition the instincts and habits of their progenitor; hence they too are nocturnal. This circumstance and their possession of nests explain their extraordinary numbers; were they not provided with nests in which to take refuge, and were they to feed in the daytime, they would become the prey to the attacks of birds and other enemies, and their numbers would be speedily diminished.

The word 'Processional' is derived from the fact that on quitting the nest the caterpillars move away from it in a long line or procession, following one behind the other with the greatest precision. When arrived at maturity they leave their protecting nest for the purpose of seeking some dry and sandy place in which they can bury themselves and undergo their transformation into the Chrysalis state. The instinct to march in procession is doubtless inherited, and it is often evinced at a very early period in the life and growth of the caterpillars. If they are much disturbed in their nest, although they may not have attained half their full size, they will quit it in procession, either leaving the tree entirely on which the nest is placed, or going to some other branch on which they will sometimes form a second nest, usually far less complete than the first.

I brought home the small nest to which reference has been made early in January; continued to watch it and to supply the caterpillars with fresh branches of fir until the end of April. Soon after the nest was brought home the caterpillars seemed to get very uneasy: some of them formed a procession and escaped altogether; the others deserted the nest and wandered for some days over the branches of the fir, but after a time they were found to have formed themselves each morning into a dense ball-

like mass, as no doubt they are accustomed to do, probably for the sake of warmth when in the nest. Ultimately they became more reconciled to their position and at length constructed a second nest, to which they retired early each morning.

Near the end of April the caterpillars were observed to cease feeding and to form themselves in line as if preparing for their pilgrimage, and gradually they disappeared from sight until one only was left. I now searched in the soil which had been specially prepared for them and found in it a number of the cocoons, and I am now at the end of July waiting for the appearance of the Moth, Bombyx processionaria.

The Processional Caterpillar is usually credited with poisonous properties, but this idea is erroneous; handling them undoubtedly gives rise to a troublesome and persistent irritation, but this is due to the exceedingly fine and sharp hairs with which their bodies are covered; the irritation is, in fact, of the same kind, and is due to the same cause, as that arising from touching the fruit of the Prickly Pear.

It will thus be seen that the Flora and Fauna of the Riviera afford abundant material for the instruction and amusement of the invalid happily endowed with a taste for Natural History.

CHAPTER V.

Chief Characteristics and Effects of the Climate of San Remo—Conditions and Diseases for which it is best Adapted—Affections and Diseases for which the Climate is Unsuited—The opinions of Medical Authors as to the Climate of San Remo—Diseases from which the Native Population are Exempt, and those to which they are mostly Liable—Saline Matter in the Air—Effects of the Dryness of the Air of the Riviera—Excitability—Sleeplessness—Winter in the Riviera—Beneficial Effects Derived from change of Climate in Diseases of the Lungs—Choice of Residence at San Remo—Want of an Esplanade at the east end of San Remo—Want of Paths up some of the Valleys—Precautions to be observed by Invalids—Proper times for Arrival and Departure—A single Winter's Residence insufficient—Characteristics of a suitable Summer Resort—Dr. Richardson's Atlantis for Consumption.

It has been shown that the climate of San Remo is in winter for the most part moderately warm, dry, equable, bright, and sunny; that the air is fresh, stimulating, and tonic. In these particulars we are furnished with the key which enables us to determine the cases and diseases for which this climate is best adapted, and in which it promises beneficial results.

Although the climate is somewhat stimulating and bracing, it is but little exciting, in which respect it differs from Cannes and Nice; the cause of this difference is mainly its less exposure to the harsh, irritating north and north-east winds. Of the fact itself there can be no doubt, as it is proved by the number of persons who suffer from sleeplessness at the places above named, and who on coming to San Remo obtain their natural amount of rest.

Let us now examine into the effects produced on the functions of the body by a climate possessing the charac-

ters described. It being bracing and dry, there is an increase of nervous and muscular power, under which appetite, digestion, and nutrition are augmented. Under the increased nervous influence and improved nutrition, the circulation becomes strengthened and the blood enriched. The functions of secretion and excretion are promoted, more particularly excretion by the skin. The dryness of the air favours evaporation, the insensible perspiration becoming quickly dissipated. In cold damp weather, cutaneous transpiration is checked, and with a moist warm atmosphere it is encouraged. It is the action of a cool, dry, bracing air on the skin when not sufficiently warmly covered, which gives rise to that sensation of chilliness here not unfrequently experienced.

Then again the light and heat derived in such great amount in winter from the sun, act as powerful stimuli on the whole organism, increasing all the functions, including especially secretion and absorption, and thus promote the removal of Morbid Deposits in the various tissues and organs.

From what has just been advanced respecting the moderately stimulating and bracing effects of the climate, it follows that it is also well adapted for cases of simple Debility.

It is especially suited, for the same reasons, to the period of Convalescence, recovery being in many cases promoted and ensured.

It is well known that the vital powers of the Aged are insufficient to enable them to resist the cold, and especially the combined cold and damp, of such a climate as England. Whenever such weather occurs in the winter there, numbers of aged people succumb, and the obituary column of the 'Times' is filled with the names of many who in a milder climate, such as that of which we are writing, might have lived on for years. The mild, dry winter climate of San Remo is therefore admirably adapted to the Aged, they being able to take daily walks and drives and so to enjoy the bright sunshine.

Again, the Young are almost equally incapable of bear-

ing cold, damp, and inclement weather, and the same conditions which carry off so many elderly and old persons are scarcely less fatal to children, especially those who are delicate.

Furthermore, the climate, from its moderate character and the absence of extreme cold or heat, is singularly well suited to persons who have lived for many years in tropical climates and whose health has become thereby impaired; in the winter it is just fresh and cold enough to gently stimulate and brace the vital powers weakened by long residence in hot countries.

The following are the principal Diseases for which the climate is especially adapted.

The majority of cases of Phthisis, as those of the ordinary type, uncomplicated with marked tendency to hæmorrhage or inflammatory disposition. I say marked tendency to hæmorrhage, because the disease being of a spreading and destructive character, the occurrence of one or even more attacks of hæmorrhage is not to be accepted as a proof of the existence of a truly hæmorrhagic tendency. Cases of the inflammatory type, are to be excepted, because of the considerable fall of temperature which takes place after sunset, and which where the disposition exists, may be followed by renewed congestion or even inflammation. That this risk is really incurred is proved by the fact that the natives themselves, accustomed as they are to the climate, are yet prone to congestive and inflammatory attacks.

It is generally stated, that the climate of the Riviera is unsuited, in consequence of its stimulating character to phthisis attended with much fever, and this may be true as applied to so exciting a climate as Nice, but it should be remembered that the attendant fever is frequently a consequence of the disease itself and is an indication of the irritation, which has its origin, to a large extent, in the profuse suppuration, which attends so many cases. If the constitutional powers be strengthened and the expectoration diminished, a result, which the climate we are now treating of is calculated to promote,

then a diminution in the sympathetic and irritative fever is rationally to be anticipated. Most cases of Bronchitis and some of Asthma do well here, as bronchitis uncomplicated with pneumonia or when attended with profuse expectoration; also cases of humoral asthma, but dry spasmodic or nervous asthma, or where there is cardiac complication, would be less likely to be benefited, partly on account of the air being too stimulating and dry.

Chronic Degenerative Diseases, particularly those of the Renal Organs; and this for two reasons: first, because the free action of the skin, which is favoured by the climate, tends to relieve the kidneys in part of their functions and so gives them more rest and opportunity for recovery; and, secondly, because of the increased activity of the functions of secretion and absorption which are promoted by the light and heat of the sun which here shines with such considerable power, most days during the winter.

Diseases attended with Morbid Deposits, for the reasons stated in the previous paragraph.

Cases of Scrofulous Diathesis or Disease. In such cases as is well known, the remedy valuable above all others, is a sojourn by the sea, but this in the winter in England, in consequence of the inclemency of the climate, cannot be indulged in with safety. In San Remo, and elsewhere on this coast the child may be out for hours almost daily, taking exercise, not as in England under a leaden sky, but in the bright, warm and stimulating sunshine.

Then again the climate is highly beneficial in many cases of Dyspepsia, especially the atonic form, as also in Gout and Rheumatism. It is favourable to gout because of its promoting digestion by its tonic and bracing character, and because being warm, dry and stimulating, less animal food and alcohol are required, and so the organs of digestion are relieved of a portion of the work which in a colder and less favoured climate would be necessarily thrown upon them. It is also beneficial in this disease in consequence of the freer action of the cutaneous surface.

The mildness and dryness of the climate are favourable to rheumatism, but the patient should be on his guard against the sudden change of temperature which takes place at sunset, and he should always be warmly clad. I would here remark however, that the fall of temperature which takes place at San Remo at sunset is not nearly so marked as I have found it to be at Cannes, nor is dew deposited to the same extent.

Lastly, some cases of Neuralgia do well here, more particularly those which are associated with debility; but there are others, as those of a purely nervous character which are sometimes unrelieved.

We will now refer briefly to those affections and diseases for which the climate is unsuited. Allusion has already been made to certain cases for which it is not adapted, as of Phthisis with marked hæmorrhagic tendency or with pneumonic and pleuritic inflammatory complications; also some cases of nervous and spasmodic Asthma.

The climate is not to be recommended for persons of full habit of body; for those who are liable to cerebral congestion, or who have an apoplectic tendency, it being too stimulating. For the same reasons, as well as on account of the hilly and mountainous character of the country, it is not good in Hypertrophy of the Heart and in Valvular and Obstructive Diseases of that Organ.

The opinions of medical authors as to the climate of San Remo in the above-named as well as some other affections and diseases may now be quoted. The late Dr. Rose, who was one of the earliest English writers on San Remo and practised there for some years, has thus expressed himself:—'San Remo is particularly well adapted for Diseases of the Lungs and air tubes, but I should never recommend anyone with a tendency to hæmorrhage to be sent either to this place, Mentone, Nice, Cannes or Hyères; neither are they suitable for diseases of the Brain and Spinal Cord, Neuralgia, or indeed any diseases of the Nervous System; and wounds rarely heal by the first intention (?): but cases of Phthisis, Rheumatism and

Paraplegia after all traces of active mischief have disappeared, and Convalescents in general, will all derive great benefit from a winter spent in these climates.'

Dr. Daubeny states:—'It is more suitable than Nice in cases where a direct irritant should be avoided, as Phthisis with a tendency to hæmoptysis. When there is general debility such an air is preferable to that of Mentone, from the absence of any depressing influence, in cases of incipient phthisis, bronchial irritation and chronic inflammation of the mucous membrane. I may add too, that those persons who in England suffer much during the winter months from catarrhal affections are at San Remo peculiarly free from them. Neuralgic affections have been much relieved and I have had an opportunity of seeing chronic rheumatism, which for years had been troublesome in England, almost disappear during a winter sojourn at San Remo.'

Dr. Onetti, who has long resided in San Remo and who has written some works on its climate, gives the following list of maladies, in which he declares it to be beneficial: Pleurodynia; Pleuritis; Angina; Bronchitis; Peripneumonia; Chronic catarrh; Pulmonary phthisis; Hæmoptysis; Carditis; Acute and chronic Pericarditis; Endocarditis; Hypertrophy of the Heart; Emphysema; Anemia; Scrofula; Acute and Chronic Rheumatism.

The above list certainly includes the names of some diseases for which the climate of San Remo is but ill adapted, as those of an inflammatory character.

Dr. Prosser James in his work on the climate of San Remo and other Mediterranean stations, for reasons which he gives in detail, but which need not be here reproduced, states that San Remo must be preferable to any of the other stations in certain cases. 'These are for the most part those for which the other localities are too stimulant. In the majority of cases of disease of the air-passages it is safer to try San Remo. In phthisis it is less likely to rouse into action hæmoptysis or any other tendency of an excitable temperament. Destitute of the depressing influence of Mentone, it is therefore to be preferred where

debility is prominent. Those nervous cases which are not adapted for the stronger air of Nice, all chronic exhausting diseases, general debility from whatever cause arising, will certainly do well here. When febrile symptoms come on at Nice, in short whenever the air is too stimulating and in those cases in which it is feared to risk a winter there, San Remo presents the most eligible point; and to those who only need to escape the month of March, and its red moon, "luna rossa," it affords an accessible refuge.'

In the work of Dr. Edwin Lee on 'Menton and San Remo,' the following appropriate observations occur. 'The climate of this coast is particularly favourable to scrofulous patients, the disposition to its manifestation in young subjects being not unfrequently eradicated by its influence. The exciting property of the air imparts a favourable impulse to the functions of nutrition and sanguification, which are so faulty in this disease, and tends to rouse the torpid nervous energy, to promote the dispersing of glandular swellings and to remove other local consequences of this diathesis.' 'Disorders of the digestive organs characterized by debility or torpor would most likely be benefited by the climates of this part of the coast.' 'The preceding observations as to the effect of climate in dyspepsia are equally applicable to hypochondriasis and to some other atonic nervous affections, whether accompanied or not by material visceral derangement.' 'Gout and rheumatism are diseases in which the beneficial effect of a warm, dry winter climate is most decided.' 'Many persons subject to gout may consequently escape their periodical attacks, or have them in a very mitigated form by passing the winter in a locality where daily exercise can be taken, and where the air, warmed by the sun's rays, promotes a freer circulation and an increased secretion from the skin, to the great relief of the internal congested organs. The same influences produce a no less favourable effect in most cases of chronic rheumatism, which are usually caused by the combined action of cold and humidity.' 'The same may be said of calculous complaints, which are very rarely met with among the natives along the Riviera.' 'Paralytic patients

mostly derive great advantage from being in an appropriate winter climate.' 'When paralytic symptoms supervene upon attacks of gout or rheumatism upon exposure to cold or damp, to malarious emanations or to other causes not referable to cerebral lesion, a complete cure may often be effected by the combined agency of climate and mineralized baths.' 'Many clergymen suffering from a relaxed state of the system with affection of the throat and hoarseness or otherwise impaired health, from over exertion or from residing in an insalubrious district, annually resort to the stations on this coast and obtain a restoration to health and strength from the influence of its climate and the cessation of active duty.' 'As respects diseases of the respiratory organs, a winter sojourn at one or other of these stations is found by experience to be eminently beneficial and in the less serious and long-standing cases, often suffices to produce a cure; in others a decided amelioration may confidently be expected, provided no unforeseen circumstances should arise by which the beneficial influence of this climate would be neutralized, and provided the cases be of a nature to which this kind of climate is best adapted: namely, such as are marked by the absence of general or local excitability and of a tendency to active hæmoptysis.' 'To most of these patients, Menton or San Remo may be recommended.' 'The climate of these stations would likewise be beneficial in most cases of humid asthma without inflammatory complication, occurring in patients of a torpid or lymphatic habit; it is however generally unsuited to the nervous form of this disease. A residence at some distance from the sea is mostly preferable for asthmatic patients.'

It will now be well to enquire into the nature of the diseases to which the natives themselves are either but little liable, or from which they chiefly suffer. Such an enquiry will doubtless bring to light much important information, serving as a guide to the suitability or otherwise of San Remo and the more sheltered parts of the Riviera for certain affections and diseases.

It has been abundantly established that the native

population not merely of San Remo, but of the Riviera generally are remarkably free from Degenerative Diseases, particularly of the kidneys, a class of affections which are so prevalent in England.

The natives are also remarkably exempt from Hereditary Phthisis, the cases which do sometimes occur being, for the most part, the consequence of pneumonia and other allied inflammatory attacks, to which the people, partly from changes of temperature, but chiefly owing to their being often badly lodged, clothed, and fed, are specially liable.

They likewise enjoy great freedom from Calculous affections and from Gout.

The consequence of this comparative freedom from such serious sources of mortality is that the death rate of San Remo is comparatively low, and this, notwithstanding the insanitary condition of the old town, the poverty of many of the people, and a considerable infant mortality. It appears from the official statistics of deaths at San Remo, kindly furnished me by Dr. Giuseppe Ameglio, that the mean annual number of deaths for eight years from 1871 to 1878 inclusive, in a population of 16,000, amounted to 338·88, which is equal to 21·18 per thousand or 1·06 in every 50 inhabitants. It should be stated that the above figures include the deaths which occur amongst the visitors who are not reckoned amongst the inhabitants.

On the other hand, the natives are especially liable to acute inflammatory attacks, particularly of the lungs, as Pleurisy, Pneumonia, Bronchitis, as well as of other organs.

They are also prone to Disorders and Diseases of the Stomach and Organs of Digestion, from being improperly fed, and to Rheumatism, in consequence of their being badly clothed and often much exposed to changes of weather.

Another disease to which they are liable is Apoplexy.

The testimony of Dr. Onetti as to the comparative

exemption of the natives of San Remo from certain diseases is as follows:—

'One here finds,' he writes, 'very few cases of Scrofula, of Rickets, of Phthisis, Bronchocèle, of Disease of the Heart, Apoplexy, Paralysis, disease of the Nervous System, of Rheumatism, Gout, &c.'—'Apoplexy attacks chiefly the poor, who abuse the use of wine and alcoholic liquors; Pulmonary phthisis, besides being rarely observed among the natives, never takes the acute or galloping form. The epidemics are very mild, of short duration and very rare; one must except the Asiatic cholera, which in 1837 made some victims, and Typhus, the ravages of which in 1846 were somewhat fatal.'

Dr. C. T. Williams, in the work which has been already quoted, writes with reference to the effect of the climate on the inhabitants:—'The testimony of all the medical men practising among the natives is to the effect that, though acute disease occurs very often, and is very fatal, chronic disease is rare, and many forms of degenerative diseases, common in England, are scarcely known there;' as, for instance, Bright's disease.

The comparative freedom of the population from pulmonary consumption is strikingly proved by the following facts. Dr. Bennet has shown that in Mentone only 1 death in 55 occurs from that disease, in place of 1 in 5 in London. Mons. Richelmi, who practised for many years in the Riviera, has stated (see Dr. Thorowgood's work 'On the Climatic Treatment of Consumption') that, out of 7000 deaths, which occurred at Villafranca, Monaco, Mentone, San Remo, and some other places on the coast, only 1 in 65 was due to phthisis.'

Dr. King Chambers, in some valuable Lectures on the Climate of Italy, which are specially noticed by Dr. C. T. Williams, has compared the registered mortality of Genoa, which forms the eastern boundary of the Western Riviera, with that of London, for the year 1862. Dr. Chambers has shown that the proportion of deaths from chronic disease is smaller at Genoa than in London in the proportion of 1 in 5·6 in the former place, and 1 in

3·2 in the latter. Anasarca in London caused 1 in 93 deaths, and in Genoa 1 in 239. Asthma and bronchitis, 1 in 10, and 1 in 20 deaths respectively. Aneurism occasioned in London 103 deaths, and in Genoa none were attributed to that cause. No deaths from Bright's disease were registered, but it is probable that some of those from general Dropsy were really due to that disease.

The proportion of deaths from acute disease is in Genoa 1 in 3·3; in London 1 in 7·7. Acute affections of the respiratory organs caused 1 in 9 deaths in Genoa, and 1 in 16 in London. Acute Enteritis, gastritis, diarrhœa, and dysentery, occasioned in Genoa 1 in 8·9, and in London 1 in 30·3 deaths. Acute affections of the nervous centres caused in Genoa 1 in 59, and in London 1 in 119 deaths. From Apoplexy and cerebral congestion there were in Genoa 1 in 12, and in London 1 in 40 deaths. Acute inflammation of the heart occasioned in Genoa 1 death in 44, and in London 1 in 606. The preceding figures clearly show that, while chronic and degenerative diseases are far less common in Genoa than in London, on the other hand, acute diseases are very much more frequent in the former place than in the latter; and although the above statistics are founded upon the mortality of two cities only, the general conclusions undoubtedly hold good to some extent for the greater part of Italy and England. The comparison no doubt is more striking in the case of Genoa than it would prove to be in most other Italian cities, and more particularly in the well-sheltered towns of the Riviera, Genoa being especially subject to great and sudden changes of temperature.

It has been stated that the climate of San Remo, and of other places in the Riviera more or less similarly situated, is particularly adapted to young, delicate and scrofulous children, and it has generally been held that part of the benefit is derived in such cases from the saline matter, iodine and bromine contained in the air; Dr. Edwin Lee, writes on this subject to the following effect. 'In speaking of the sea breezes, however, it is not to be

supposed that I attribute any special effect to the marine atmosphere, which has been considered to exert such a powerful influence upon diseases of the lungs and air-passages; for the air on the shores of the calm bays of the almost tideless Mediterranean has been proved to possess no properties distinctive from land air, such as are possessed by that on the shores of the Northern seas, which, having tides and being mostly in a state of agitation, produce a certain amount of impregnation of the air with saline particles, which is often very perceptible to the senses.' In expressing himself thus, Dr. Lee is doubtless in error. The Mediterranean as already shown, is not an altogether tideless sea, neither is the air on its shores calm, nor the waters in its bays free from perturbation; on the contrary, the shores of this inland sea are much exposed to winds, as are sea-shores elsewhere. The air here then, as in other places, is frequently perceptibly saline.

Dr C. T. Williams expresses himself on this point in a contrary sense. Thus, he states, 'this stimulating character of the air is to be referred partly to the saline breezes coming from one of the saltest seas known, and partly to its dryness.'

The dryness of the air, as has been shown, constitutes one of the chief characteristics of the climate of the Riviera and to which its beneficial effects are in part to be attributed. In some localities this dryness is excessive and is attended with certain inconvenient results; it is to it that the excitability and want of sleep complained of in some places are in a measure to be attributed. This sleeplessness is however seldom experienced in San Remo and most persons rest well and soundly there, especially if not too near the sea.

Dr. C. T. Williams in reference to this subject writes:— 'It is probably to the stimulating quality of the air that the want of sleep so common among visitors is due. Patients seldom sleep so soundly as in England, and often only for a few hours of the night. Many take a siesta in the day. But evil results seldom follow from this wakefulness; for the nervous system, as Dr. Chambers remarks,

being in a healthier condition seems to require less repose and refreshes itself more rapidly.'

It is found that those who reside nearest to the sea suffer most from sleeplessness, although why this should be so, is not very clear, apart from the wind and noise of the waves. The occasional impregnation of the air with saline particles does not afford an adequate explanation. In such cases a removal to a situation a little further from the sea is often sufficient to put an end to this wakefulness.

It has been already stated and shown that during two or three months of the winter, even in the most sheltered parts of the Riviera, a considerable degree of cold is at times experienced. Most persons, especially those who come here for the first time, express surprise and disappointment at the cold felt, the sensation, owing to the increased activity of the skin, being much greater than the actual cold as shown by the thermometer.

It is in the house that the greatest cold is experienced, the air usually feeling several degrees colder than out of doors; indeed, the external air is seldom so cold as to be trying. This difference is partly explained by the fact, that the light and heat of the sun reach the interior of the dwelling only with difficulty, especially those parts of it which face northwards, and partly by the circumstance that the inmates are unable to take sufficient exercise to keep themselves warm.

But it may be questioned whether the moderate degree of cold experienced at times during ordinary seasons is not really beneficial rather than the reverse to most invalids, especially those suffering from pulmonary consumption. The cool air exercises a bracing effect, promotes appetite and digestion, increases nutrition and so improves the general health and strength. On the other hand, continued warm weather exerts contrary effects, fever is increased, the appetite impaired, and the strength reduced. Alternations of temperature within limited degrees, within in fact such limits as are here usually experienced, rarely exceeding ten degrees, are highly conducive to the promotion and maintenance of health.

Several medical writers dwell on the undesirability of a too prolonged residence in a very equable and warm climate, as being calculated to induce debility and all its consequent evils, and they point out that moderate atmospheric changes, including changes of temperature, are beneficial rather than hurtful. Amongst these may be mentioned Sir James Clark, Dr. Combe, Dr. Edwin Lee, and Dr. Rullmann, whose work entitled 'The Therapeutic Influence of Southern Climatic Sanitaria' we will now quote, as his remarks are particularly to the purpose. 'Much importance has been attached to uniformity of temperature, and it is certain that great and sudden changes act injuriously on those affected with pulmonary disease; but a moderate alternation has for the most part a beneficially exciting and strengthening influence on them, particularly on those who are of a weakly constitution, while great uniformity may produce prejudicial relaxation. We often observe this in our summer: when a high temperature has prevailed during the day, a mild night and morning coolness has a particularly refreshing and animating effect, both on the healthy and on invalids. Alternations of temperature have no longer an injurious influence when they take place with a certain constancy and regularity.' 'But the warmth,' Dr. Rullmann points out, 'must not exceed a certain degree,' and he calls attention to the fact 'that all the southern climatic sanitaria of acknowledged repute lie within the temperate zone.'

To such an extent are some members of the medical profession imbued with the opinion that a dry cold climate is beneficial in cases of consumption, that it has now become the fashion to recommend patients to spend the winter in cold Alpine stations, such as St. Moritz, and Davos Platz. Although no doubt benefit may be derived from such localities in some few cases, especially those in an incipient stage, and in which the constitution and general strength are but little impaired, they are in my judgment wholly unsuited for the generality of cases, and the greatest possible care is necessary in the selection of patients for such climates. To send them there indis-

criminately is to consign them in many cases to an early grave.

It is impossible to bestow too much care and thought upon the choice of a suitable climate for the phthisical, the nature of which must depend to some extent on the character of the case. Here a few statistics may be given, showing the benefit derived in many lung affections, including especially phthisis, from a residence, even temporary in a suitable climate, particularly when combined with appropriate treatment by regimen, medicine, and hygiene. I am induced to cite the following figures, mainly because increasing doubts seem to be entertained by some medical men as to the real and permanent improvement resulting from change of climate.

From an examination of the Medical Reports of the Royal National Hospital for Consumption and Diseases of the Chest, located at Ventnor, an Institution founded by myself, I find that of the 474 patients suffering from chest affection, treated in that institution during the years 1870, '71, '72, and '73, 122 were discharged from the hospital as improved; 161 much improved; 83 very much improved; 28 as restored; 34 in much the same condition as when they entered; 22 became worse and only 24 died. The gain in weight amounted to 2112 lbs., and those who lost weight did so only to the extent of 286 lbs. Of the 619 cases admitted during 1874 and '75, 130 left in improved health, 122 were much improved; 167 very much improved; 41 were restored; 91 remained in much the same condition; 37 became worse and only 31 died; while the gain in weight amounted to 2117 lbs. Of the 888 cases received into the hospital during the years 1876 and '77, 203 left it in improved health; 166 were much benefited, 236 very much so; 62 were restored; 77 remained in much the same condition; 94 became worse, and 50 died. No records were kept during these two years of the gain and loss in weight. Lastly, of the 501 patients admitted during the year 1878, 106 improved; 78 became much better, 150 very much so; 53 were

restored; 36 remained in much the same condition as when they entered; 62 became worse; and only 16 died: 332 of these patients gained 1840 lbs. in weight and 124 patients, not including those who died, lost 411 lbs. Very full records of cases at this hospital are kept; those for the first six years were under my own care.

The above results are very striking and prove the extraordinary benefit which most persons suffering from consumption and other diseases of the chest derive from change of climate, suitable diet, and appropriate medical treatment. There is no reason to doubt, that results equally remarkable are obtained in other suitable localities under like favourable conditions.

Supposing San Remo to be selected as the winter station, a few words may now be bestowed on the subject of the choice of a residence. The east and west ends of the town have already been described in part, and some of the differences between the two pointed out. The west end stands on high ground with but little level space between the sea and the hills; it is also close to the sea and is provided with a handsome promenade elevated many feet above the shore. At the east end of the town there is more land on a level with the sea, well covered with Olive trees; the high or Genoa road, on either side of which the houses are built, runs at a considerable distance from the shore; a view of the sea being scarcely obtained until the Victoria Hotel at the easternmost extremity is reached. There is no esplanade here.

It thus appears that the west end of the town is the cooler and fresher, and being closer to the sea is more exposed to the winds and more noisy; also that it is dryer and more hilly, so that in order to reach some of the houses it is necessary to make a considerable ascent. This last consideration is one of much importance for persons suffering from chest affection.

The east end of the town is warmer, more on the level and more sheltered from winds coming from the sea, the noise of which is seldom experienced to a hurtful extent. It is however during the prevalence of wet weather less

dry, and it lacks the freshness and cheerfulness of the west end, owing to its distance from the sea and the absence of a promenade and indeed of any other level walk, except that along the Genoa road.

The above particulars furnish some information as to the position to be chosen for a winter residence, which of course must depend to some extent upon the nature of the case. The air surrounding houses near the shore is of a stimulating character, rendering such a situation undesirable where any tendency to sleeplessness exists; whereas that more inland is much less stimulating and may be even sedative according to the distance from the sea and the nature of the surroundings, especially the amount of vegetation.

Were a proper esplanade constructed by the sea, extending from the end of the Via Ruffini eastward, the character of the east end of the town would be entirely changed; it would become dryer, fresher and brighter, although it would still retain its exceptional warmth and shelter; in fact it would then be far better adapted for the residence of invalids, and the value of property there would be speedily more than doubled. At present nearly the whole of the English reside on the west side of the town, and while there is scarcely a villa to be let there, some houses always remain unlet during the whole season at the east end. The great need on the eastern side is the esplanade, and an effort ought to be at once made for the construction of this. Towards the cost, the landowners, landlords and Hotel keepers should largely contribute, as it would add so materially to their prosperity. What can be done in this way by the enterprise of a single individual is shown by the small portion of an esplanade which has been constructed in the rear of the Victoria Hotel. I feel certain that it needs only a united effort to insure the construction of this much required eastern esplanade.

But the opening up, by the formation of good and easily accessible foot-paths, of some at least of the sheltered and lovely little valleys lying on either side of the town is almost as necessary as the construction of the esplanade.

There is hardly another town to be met with which has in its immediate vicinity so many valleys offering beautiful walks and the most grateful shade and shelter, and yet so far as invalids, visitors and, indeed it may be said, the general public, are concerned, these valleys are for the most part useless for the purposes for which in a health resort they are so specially adapted. There is scarcely one of them which can be entered on a level with the town and not one which possesses a good, clean foot-path. To get at these valleys it is necessary to enter, not as might be imagined from below the hills, but from the top, to reach which, ascents altogether beyond the powers of invalids, and indeed of many persons who are not incapacitated by sickness, have to be made.

Of the invalids and visitors who come to San Remo, it may be affirmed, there is not one in fifty who has any knowledge of the extent and beauty of these valleys.

A great and almost fatal mistake has been committed in not preserving a proper right of way by the sea-shore and also through each of these valleys; obstructions have been allowed to spring up in all directions which render the accomplishment of many of the improvements so much required, not only difficult, but vastly more expensive than they otherwise would have been. Such thoroughfares would be not merely non-injurious to private rights, but while they would improve the town and add to its attractions, they would also immeasurably enhance the value of property, not only near the sea but along the course of the valleys.

It is not enough that San Remo should possess a good climate, comfortable houses and excellent hotels, but it is necessary that suitable walks, promenades and drives should be made, suitable alike for exercise, pleasure and health; these it cannot be said that the town now possesses to anything like an adequate extent. San Remo has doubtless been much improved of late years, and it now possesses most of the requirements of a health resort; still its rise has not been so rapid as it ought to have been, nor will it be so in the future, as long as the above and certain other very obvious deficiencies continue to exist. Very

many of the improvements have reference to the construction of additional houses and buildings in the town and neighbourhood, and which are calculated to produce an immediate return on the outlay involved; but in the case of a health resort it is often advisable to spend money in advance, on necessary improvements, with a view to a future but equally certain return; to sow, in fact, seed that later an abundant harvest may be reaped.

It is evident from what has been so repeatedly stated respecting the climate, that invalids, in order to derive the full amount of benefit from it, must strictly observe certain precautions.

1. Most invalids, and indeed all those who are suffering from affections of the chest should occupy only south rooms in the winter months, whether for sitting or sleeping.

The temperature of a north room in the daytime is several degrees below that of a south room even when the sun is not shining, but the difference will of course be very much greater when the sun is upon the latter. The same holds good to some extent even at night. In winter on the coldest days when the sun is shining on a south room it will be so warm as to allow of the door or window being open, and the temperature will remain during the fine part of the day some degrees above 60.

Immediately after the setting of the sun, there is a considerable fall in the temperature, and the nights from the middle of November to the middle of March, even in the most sheltered situations of the Riviera, become very cold at times, especially with a north wind. Cold as the nights are comparatively in winter, there is only a mean difference at San Remo of about 12° between the day maximum and the night minimum.

Although the occupation of south rooms and especially of a south bedroom is essential in the case of most invalids in the winter; yet, in advanced spring and summer, the reverse holds good, because then the nights and days become almost equally warm and the night

temperature is trying and enervating; at such times it is better to sleep in a north room.

2. Care should be taken that the bedroom be airy and well ventilated. If it have a fireplace the ventilation is in a measure insured thereby, but if not and the door be in a favourable position it would be advisable to keep it more or less open, even if only to the extent of an inch it forms an excellent ventilator. Some writers recommend sleeping with the window partly open, this however is a proceeding to be adopted only with great caution, two or three inches only being opened, and the window covered with a blind or curtain. But the partially opened and guarded window is only suitable for the warm nights of advanced spring.

3. Invalids should be warmly clad, wearing in fact very much the same winter clothes they would do if in England; the object being to keep themselves as far as possible comfortably warm, even to the hands and feet; it is very advisable that they should carry with them when out of doors, an extra coat or shawl, which even in the house it is often requisite to wear. The San Remese, and indeed it may be said Italians on this coast generally, very commonly carry a second coat, in readiness to put on, should the weather become suddenly chilly; and it is by no means uncommon to see men wrapped up in shawls, much in the same way as women. It is impossible to be too careful in this respect.

4. Another precaution is, never to be out after sunset, or rather to return home some little time before, as if the day has been bright and sunny and the sky clear, there is always a very considerable fall of temperature, immediately that the sun descends behind the mountains. If unavoidably out after sunset, an extra wrap should be put on.

5. Invalids, especially if suffering from chest affection, should not go out when the air is damp, when it rains or when strong, cold or damp winds are blowing.

6. They should be most careful about sitting out of doors; they must only do so when the sun is shining and

they are themselves placed in some warm and sheltered situation. If a suitable locality be chosen they can often bask in the sunshine during the winter for hours together. It is advisable always to be provided with a sunshade, as if the powerful rays of the sun are allowed to fall directly on the head, they frequently give rise to troublesome headaches of a congestive character.

Over-fatigue should be scrupulously avoided; no long excursions undertaken, and above all, if the lungs be affected, climbing up the hills and mountains should be absolutely forbidden. Much mischief constantly ensues from a neglect of these precautions. There are so many beautiful excursions with such lovely prospects that invalids are often tempted to exceed the bounds of prudence.

There are no more suitable walks for invalids than in the Olive groves and valleys; in these the air is nearly always warm and still, even on the most gusty days scarcely a breath of disturbing wind penetrates to these spots, but the difficulty is to get at them without having to make a greater or less ascent. For those who occupy the villas high up on the western side of the town, there is happily a tolerably easy access to the Olive groves.

There are very many excursions available for invalids by the aid of donkeys, but the majority of these should only be undertaken in warm and fine weather.

For a full account of the rides and walks, the reader is referred to the succeeding chapter.

'During the colder part of the season,' wrote Mr. Aspinall, 'it is of course desirable to keep low down in the valleys amongst the Lemon and Orange groves where you can always have warm, sheltered walks, and where you may saunter for hours without a breath of wind touching you; at one time surrounded by Orange and Lemon trees with their golden fruit, while at another the Olives with their silvery foliage and picturesque old trunks shut out all further view, except here and there a peep of the deep blue sky—and what a sky! Then again you catch a glimpse of the lovely sea, or a view of a valley, or a portion

of the quaint old town, or you come upon a group of Palm trees.'

'But the time for the most thorough enjoyment of the country is during the spring months when the groves are alive with birds and insect life, and when the terraces and places are literally carpeted with flowers, some of them quite dazzling from their brilliancy, flowers, many of which in England ornament our greenhouses, but here grow wild in the richest profusion. This is the time for the more distant excursions when you can take your lunch with you and spend the greatest part of the day in the open air. It is now warm enough to leave the Olive groves and ascend to the Pine regions, from which the views of mountains, hills, valleys and sea, are glorious beyond description.'

The questions are often asked how soon ought persons to arrive at San Remo for the winter and at what period should they leave; these questions have often been answered, but not always in the same way. I will now reply to them in accordance with the opinion I entertain myself.

First, I recommend the intending visitor not to delay his departure from England too long, lest he take cold and his health be injured, but to leave it by the 1st of October, even if he do not come straight to San Remo, but spend a few days on the way; reaching it not later than the middle of the month, by which time the autumnal rains will usually be over and a period of dry and fine weather may be expected.

With respect to departure, this should be postponed as long as possible, and it should certainly not take place earlier than the middle or better still the end of May. The weather during the spring and early summer is usually most beautiful and enjoyable, being by no means hot. It is in the spring months that the patient usually derives the greatest amount of benefit from his sojourn abroad; it is then that the weather becomes fine, bright and warm, and the days long, so that he can be constantly out of doors with advantage; it is then that all nature awakes

with renewed life and the earth, the hills and mountains become clothed with new beauties, imparting endless pleasure to the invalid in his walks and excursions.

During the winter months, if afflicted with disease of the chest, all he can reasonably hope to do is to hold his own, and if at the end of the winter he is no worse than he was at its beginning, he has much to be thankful for. Most people make two great mistakes; first in arriving too late at San Remo, and second in leaving for England far too early. Many act as if their only object in coming was to escape the rigours and trials of an English winter and seem altogether to forget that further and still more important object, a radical and permanent improvement in their health, which can only rationally be expected as a consequence of a prolonged sojourn and this under the most favourable conditions of climate and weather. No sooner do the early signs of spring show themselves, than very many persons begin to grow impatient and hasten their return home, ignoring the fact that although the weather here may be bright and sunny, it is still cold, cloudy and even wintry in England. Remember that on the 1st of May, in or near London, there are scarcely any flowers in blossom even of the commonest kinds, not enough in fact to meet the requirements of the so-called 'Garland Day;' also that not unfrequently the 'Derby' is run in a snowstorm.

The result of this imprudence frequently is, that all the good derived from a residence at San Remo is too often wholly undone. The fact should not be forgotten that persons who have spent the winter in a mild climate, such as this, are for a time still more susceptible to the effects of cold weather than they would have been had they not come here at all.

To spend only three or four of the severest months of winter, especially in cases of Consumption and Bronchitis, and then to return home to the same conditions and surroundings under which their maladies have arisen, expecting at the same time that their short stay will result either in a great amelioration or even cure of the diseases

from which they are suffering is certainly most unreasonable. We are convinced that were a different proceeding adopted and were sufferers from lung disease to prolong their sojourn abroad in suitable localities for several years both winter and summer, a large proportion of those who now ultimately succumb might be saved and their lives prolonged to a good old age. The plan now pursued of going abroad for a short winter and returning to England or other countries with a climate equally variable and cold for the rest of the year, is thoroughly wrong, and stops far short of what is required.

The time spent therefore at San Remo in cases of lung disease, to which our remarks more particularly apply, should not embrace a period of less than seven months, but it would be better still if the time were prolonged to eight. The Cannes season lasts eight months, and houses are usually let for that period, that is, from the 1st of October to the last day of May. At San Remo the Villas are generally let for the short term of six months and a half, people being expected to arrive about the middle of October and to take their departure by the 30th of April, at which time most of the agreements are made to terminate. For this there is no sufficient reason, and much may be said against it. The climate of San Remo is comparatively cool in the spring and at the end of April it is certainly unsafe for most invalids to return home. Besides, the charges made for furnished houses are certainly amply sufficient to cover a longer period than six months, and we would advise those who intend to take houses to insist on a term of seven months at the least, and not to pay the extra rent after the end of April, as many are often compelled to do. After April is over there is but little chance of the proprietors re-letting their houses, and the precise date at which the tenancy terminates can really be of little consequence to them.

The climate of San Remo, as we have seen, fulfils nearly all the reasonable requirements of a health resort, still it is by no means perfect, neither does it fulfil all the expectations formed by the sanguine. There is in fact

no such thing as a perfect climate to be met with on the face of the earth: there must be winds, rain, sunshine and variations of weather everywhere. An unvarying climate would be anything but health giving. If however San Remo be deemed too cold and variable, the question becomes pertinent, where is a more suitable climate, particularly for diseases of the chest, to be met with at a reasonable and accessible distance from England and the north of Europe?

It is certain that no place in the south of France or Italy possesses advantages superior, or on the whole equal to, those of the more sheltered portions of the Western Riviera.

But the question of a Summer Resort is scarcely less important than that of the winter residence; it is not proposed, however, to enlarge on this subject or to indicate on the present occasion any particular places, but merely to state in general terms the characteristics of a summer health resort, suitable for the majority of phthisical cases.

The air should be dry, cool, moderately equable, but not cold; and the difference between day and night temperature should not be too considerable; the situation should be sunny, the sun neither reaching it too late in the day nor leaving it too early, as is the case with many of the mountain health resorts, now in fashion; the elevation should not be too great, two, three, or at the most four thousand feet. I have known persons who have been sent to the Engadine, suffer greatly in their breathing, even in summer, from the rarefaction of the air at that elevation, the difficulty being further increased by the great difference between the day and night temperature, and the cold of the early morning and afternoon as contrasted with the almost tropical mid-day heat.

This chapter cannot be more appropriately concluded than by the following quotation. I was much struck on reading it with the close resemblance of San Remo in almost every particular to the picture of an hypothetical Atlantis for Consumption, so well drawn by Dr. Richardson:—'It should be near the sea-coast, and sheltered from

northerly winds; the soil should be dry; the drinking water pure; the mean temperature about 60 F., with a range of not more than 10 or 15 degrees on either side. Extremes of dryness and moisture are alike injurious. It is of importance, in selecting a locality, that the scenery should be enticing, so that the patient may be the more encouraged to spend his time out of doors, in walking or riding exercise.'

'Perfection is not to be expected in anything sublunary; and, as the Italians say, "Ogni medaglio ha il suo riverso."'

CHAPTER VI.

EAST OF SAN REMO: The San Francia Valley; Chapel of San Giovanni —The Olive Mills—Chapel of San Michele. The Bestagna Valley; Church of San Pietro—Croce di Parà and Chapel of Villetta. The Martino Valley; The Chocolate Mill—The Corn Mills—Verezzo. The Vallée des Oliviers. Capo Verde and the Chapel of the Madonna della Guardia. The Valley of Ceriana; Poggio—Ceriana. The Valley of Taggia; Taggia—Castellaro—Madonna di Lampeduza. WEST OF SAN REMO: The San Romolo Valley; West side of Valley —The Madonna del Borgo—East side of the Valley—San Romolo—Piano del Rè—Monte Bignone. The Foce Valley; Chapel of San Bartolomeo—San Lorenzo—Descent of the Mossè and Foce Valleys —Walk in the Foce Valley. The Bernardo Valley; Chapel of San Bernardo—Madonna di Bonmoschetto—Colla.

No one can form any idea of the exceeding beauty of the environs of San Remo who has not stayed there long enough to explore some of its valleys and mountains and so beheld some of the most beautiful of its scenery; neither without such exploration can any just opinion be formed as to the resources which San Remo offers to the visitor and invalid, or of the vastness and completeness of the mountain shelter which it affords. It is with a view to make apparent the extent, variety and beauty of the excursions in and around San Remo and to render the topography of the neighbourhood more easily understood, that I have myself made a considerable number of excursions, the chief features of each of which will be found described in the following pages. Mere descriptions of walks and excursions on paper are not easily followed unless the places themselves be visited; when they are so, details

which may otherwise seem confusing and difficult to follow, become clear and easy. If it be recalled to mind that San Remo occupies nearly the centre of a considerable area surrounded by mountains, gradually increasing in height towards the north, from the Capes east and west of the bay, that a number of valleys originate from the sides of these mountains, running towards and terminating near the sea, and that these are separated the one from the other by a series of long hills or ridges, each with its chapel, the key is afforded to the topography of the district, and it becomes evident that the arrangement is of the simplest kind and that little difficulty need be encountered in finding one's way about and making most of the trips described without the aid of a guide; the excursions may be divided into those on the east and those on the west of the town of San Remo the centre of which is crowned by the Madonna della Costa: those excursions to the east will first be given.

THE SAN FRANCIA VALLEY.

Chapel of San Giovanni—The Olive Mills—Chapel of San Michele.

The first valley to the east of the old town and of the Madonna della Costa is that of San Francia. The termination of this valley is at the eastern end of the Via Palazzo, where the road crosses it, here bordered by an iron railing. On looking over this, a small torrent making its way to the sea, as usual the receptacle of all kinds of refuse, is seen, as also numerous Lemon trees, but no way of access to the valley, strange to say, exists at this point, although a broad, dry, level footway here would be of the greatest possible advantage to the inhabitants and especially the invalids who resort to San Remo. To enter the valley it is necessary to make a considerable ascent and to climb up through the old town to the Madonna della Costa—a feat beyond the strength of many invalids.

Just behind the Madonna della Costa, the pathway divides into two, one branch continues onwards nearly in a straight line on the top of the ridge which separates the San Romolo from the San Francia Valley, and which leads to San Romolo and Monte Bignone; the other bears a little to the right, and in the angle between the two is a small house. Follow this path for a few minutes, when on turning round, a fine view is obtained of the sea, of Capo Verde, surmounted by the Madonna della Guardia, and of the mountains forming the eastern boundary of the San Remo amphitheatre. Continue on for about half an hour, taking care not to leave the path for either of the two footpaths or the mule-path on the right which lead down into the valley; at the end of that time the road turns down towards the stream, which is here crossed by a two-arched bridge.

Soon after leaving the Madonna della Costa and looking down into the valley through the gaps in the Olive trees, a great many Lemon trees, laden with fruit, are visible, some fine groves of the same skirt the path, as well as many Almond trees, now on the 7th of March in full blossom, their delicate pink colour standing out in striking and pleasing contrast with the dark green of the Olive trees. So abundant are the Lemon trees that this Valley might well be called a Lemon Valley. Everywhere the ground and in some places even the walls are blue with violets. Although these have been daily gathered in immense quantities for more than two months, the supply shows no sign of being thinned, but appears to be practically inexhaustible. Another plant of which many specimens are seen on the way, is the small or indigo blue Grape Hyacinth, now called Botryanthus vulgaris Kunth. Here and there are large patches of broad beans in full blossom, scenting the air with their sweet perfume.

The view of the lofty hills on the other side of the valley is very fine, especially as seen on the descent to the bridge. On the other side of the bridge and close to the stream is an olive mill, behind which is the road up the valley which brings you in a quarter of an hour to *The*

Chapel of San Giovanni, distinguished by a large fresco of John the Baptist. The ascent to the Chapel is rather steep, but, after passing it, becomes still more so. In a few minutes after leaving the Chapel, a mule-path going up on the left, and then a rivulet are seen, and a little further on another, which you cross; the road then becomes very steep and winds up the edge of a rock, till near the summit of the ridge, a point reached in about a quarter of an hour. The path then turns off to the right skirting the ridge but at a little distance below it. From this position a very fine view is obtained; on the right, of Capo Nero and Colla, with its churches boldly outlined on the horizon, and of the mountains forming the western half of the San Remo amphitheatre, as well as of the several spurs or ridges, each with its Sanctuary, which separate the valleys, while in front, the Sanctuary of the Madonna della Costa and the harbour of San Remo with its Fort and Mola come into view. The vegetation which skirts the pathway to the ridge, and which clothes the ridge itself, is totally different from that before met with lower down; we have now ascended above the region of the Olive trees, and cropping up between the fissures of the rocks are bushes of myrtle covered with their small, purple olive-like fruit; of Juniper, and Rosemary, both in blossom; of Pistacia Lentiscus, and also of the large pink Rock Cistus, C. albidus, which however is not yet in flower.

A good climber might here leave the pathway and ascend to the very summit of the ridge, when doubtless he would be rewarded for his exertions by a still nobler prospect; but it is now time to think of returning home. The distance to the Chapel of San Giovanni is not considerable or the ascent great, and the excursion thus far is one that could be undertaken by most persons; and does not occupy more than an hour from the Sanctuary. The remainder of the journey is however a trying one and should only be undertaken on foot by the strong or on a donkey; even then the road in some places is exceedingly rough. To return home, do not retrace your steps, but continue on the same path, which now makes for three or

four minutes a steep descent over some layers of shale; you will then notice a pathway leading right and left, turn to the left and very soon the bed of a small stream is reached, follow this for a few yards, when you will notice a thin cascade of water flowing over a long slanting rock. The road now ascends, winding round to the right and in a few minutes you come to a small shrine, where it divides into three; one ascends the hill, one branches off to the left and goes to San Pietro, the other turns to the right, and this is the one to be now followed. The descent by this road which runs for some distance along the spur which separates the San Francia from the Bestagna Valley is very steep, the vegetation nearly similar to that on the ridge above, but with the addition of many bushes of Broom, Spartium junceum L., and of the Prickly Broom, Calycostome spinosa Link. After continuing the descent for about half an hour, a path is seen running in the direction of the Bestagna Valley and by which the return to the town may be made, but it may also be made by continuing to follow the wide path: this brings you to a small one-arched bridge, near to which is a mill now closed; having crossed this bridge the mule-path ascends and joins that by which we originally started, so that we reach home by the old town. This is a particularly pleasant and even beautiful excursion. In the visits which we have hitherto made to the valleys around San Remo the silence has only been broken either by the murmur of the streams flowing through them or by the reports of murderous guns, scarce a twitter from the birds themselves being heard; but on this occasion all was changed, the Olive woods resounded with the notes and songs of birds, the firing of guns was no longer heard, the sportsmen being deterred, it is to be hoped, by some municipal regulation, prohibiting the destruction of birds at this season of the year.

The Olive Mills.—A shorter excursion is that to the Olive Mills. Ascend through the old town as before; on emerging from the archway instead of following the road up to the Sanctuary, turn off by the first mule-path on

the right which leads down the valley. In the course of a few minutes you arrive at the stream; this is here crossed, either by a combined aqueduct and foot-path, the latter leading to some mills at present disused, or by a picturesque little bridge. On the other side of this on the right, an old Fig tree is seen with its thick trunk so much inclined over the path, that it has been propped up, and on the left two Olive Mills. The view of the aqueduct and bridge, of the stream, the valley and its surrounding Olive-clad hills and mountains is very pretty, and the scene altogether is one which artists are fond of sketching. Having crossed the bridge, the ascent becomes rather steep, but in a few minutes the path divides, that to the left leads to San Pietro, and the one to the right skirts the edge of the valley for a short distance, and from here there is a very beautiful view; looking down into the valley many Almond and Fruit trees are seen covered with their pink and white blossoms, and numerous fruit-laden Lemon trees, the colours of all these standing brightly out against the blue green and silver tinged Olive trees; on the other side of the valley the Madonna della Costa and a portion of the old town are seen in bold relief, while up the valley there is a fine view of the Olive-crowned hills and of the more distant Fir-clad mountains. A few yards from this, the path turns to the left past the Villas Bosio and descending, terminates in a road recently made which runs beside the parish church of the Madonna degli Angeli, at the commencement of the Corso Garibaldi. This excursion occupies little more than an hour, and but for the ascent through the old town would be an easy one. For those who cannot go up hill well, it would be better to enter the valley by the Church of the Angels, and to return by the old town.

The Chapel of San Michele.—Follow the San Romolo road, which runs on the top of the ridge separating the San Romolo and San Francia valleys, for about forty minutes, by which time the chapel of San Giacomo on the left is reached. On the way a shrine with a broad blue border is passed, from this a path is given off on the left

which descends into the San Romolo valley. Immediately after passing the Chapel a small shrine is noticed on the left, and in five minutes more a path branches off on the right which descends into the valley of San Francia. From this point the head of the valley comes well into view and the Chapel of San Michele is seen perched high up, the mountain behind it being clothed with fir-trees. To reach this chapel, the San Romolo road must be left and the pathway down the valley above noticed followed; there is an excellent view from the chapel of the valley of San Francia and Mr. Aspinall states that he found some good specimens of fossils of vegetables among the fir-trees behind the chapel. The ascent to San Michele is steep. The return is usually made by the San Romolo road, but it may be varied a little by descending into the valley of San Romolo to the path already referred to as branching off at the shrine with the blue border; this may be reached by a somewhat narrow and steep path, from the San Romolo road, just after passing the chapel of San Giacomo. This excursion is described by Aspinall under the head of the San Romolo or West Sanctuary Valley, but it really belongs to the San Francia Valley, at the head of which the chapel is situated.

THE BESTAGNA VALLEY.

Church of San Pietro—Croce di Parà—Chapel of Villetta—The Bridge.

Leave the main road at the church of the Angels, ascend the mule-path which passes by the Villas Bosio, and which skirts the eastern side of the San Francia valley, it being in fact the same path by which the return was made from the Olive Mills as described under the head of the San Francia Valley. Follow this path for about a quarter of an hour until it divides into two in front of a shrine; on the way the little path on the left is passed, leading down to the bridge which crosses the stream; the path to the left of the shrine joins after a

time that by which the return from the Chapel of San Giovanni was made, as already described. Take the path to the right, which at the second shrine passed bears to the left, and now begins to skirt the Bestagna Valley; at this point the sea becomes visible through the branches of the Olive trees, and a good view is obtained of the valley, densely clothed with Olive trees, and of the houses scattered over the lofty hills which form the eastern boundary of the valley. In about twenty minutes the valley narrows considerably, and seems in fact almost to terminate, the stream being crossed here by a small bridge; don't go over this however, but continue to ascend by the path which you have hitherto followed, this for a short distance is very steep, two little bridges are crossed, and two cascades flowing over long slanting rocks are passed; immediately afterwards the very pretty and well preserved little *Church of San Pietro* is reached, commanding a good view of the Bestagna Valley. The return home may be made either by the Church of San Giovanni, or by the Croce di Parà and Villetta, if the former be chosen, ascend a short distance the same mule-path by which you arrived; bear a little to the left, ascending about 200 feet; bear again to the left till some cottages are reached, then turn still more to the left down the hill, when you will reach the road from San Giovanni by which the return to San Remo must be made.

If the way by the Croce di Parà be chosen, continue up the pathway to the right for a few minutes, when it divides; follow the left-hand division, the ascent is very steep and rough and must be continued for a quarter of an hour or twenty minutes, when the ridge of the hill is reached and the wooden cross, *The Croce di Parà*, comes into view. From this site there is a really very magnificent prospect; in front lies the broad Martino Valley, with, on the further side, the church of Sant' Antonio and the scattered houses of Verezzo; on the nearer side the handsome church of San Donato with its fine tower; to the left is Monte Bignone, while behind is the valley of Bestagna, with, in the distance, the Madonna della Costa

and the sea. From the Croce three roads branch off, one to the left runs along Il Poggietto, a crest which leads up to the summit of Bignone, a second, also somewhat to the left, goes down the Martino Valley to Verezzo, by which San Remo may be reached, and a third, which turns to the right and, skirting the western side of a small hill, runs along the ridge which divides the Bestagna and Martino Valleys. Ascending now to the tower built on the ridge of Il Poggietto and at an elevation considerably above the Croce di Parà, a still more extensive and glorious view is disclosed. On the right, Capo Nero, the churches of Colla, the Madonna della Costa, San Remo and its port and the Bestagna and San Francia Valleys are all spread out beneath; while on the left are the Martino, Ceriana and Taggia Valleys with Bussana, Poggio, Capo Verde crowned with the Madonna della Guardia, and lastly Pompeiana. Thus from this point the whole of the mountains, forming the San Remo amphitheatre including Bignone, with most of its enclosed valleys and towns, are all clearly visible. The view here is altogether different from that obtained at lower elevations; the Croce di Parà is just above the region of the Olive trees, and the summits of many of the surrounding hills and mountains are almost bare, although some of the peaks are clothed with forests of fir-trees.

Seen from this point some of the higher hills present a striated appearance, their component strata being vertically disposed; others though apparently denuded of vegetation are really more or less covered with brushwood formed of Juniper, Pistacia, Rosemary, Prickly Broom and a variety of mountain plants especially interesting to the botanist. Altogether the view from Il Poggietto is one of the finest I have yet beheld.

The day was splendid and at 2 o'clock on the afternoon of the 10th of March, the sun was shining strongly and the air was as warm as a Midsummer's day in England. The new year's butterflies, chiefly white ones, with occasionally a Painted Lady, which no doubt had survived the winter, were everywhere to be seen in great numbers, as well as

many Humming Bird Moths. While admiring the view from the Croce, two bird-killers passed me making their way to the pine-forests of Monte Bignone and shortly afterwards the reports of their guns were heard, showing that up to this date the poor birds had not been granted the protection of a close season. These pine forests are said to contain thrushes in large numbers.

The return home was made by the path to the right leading round the west side of the hill and traversing the ridge dividing the Bestagna and Martino Valleys.

From this ridge also extensive views are obtained; on one side of the valley of Bestagna and San Remo, on the other of that of San Martino with the towns of Bussana and Poggio, with in front the blue Mediterranean dotted with white butterfly-like sails. The descent is very steep and rough and occupies about an hour; although the road winds about somewhat there is no possibility of mistaking the way. The small Chapel of Villetta is passed a few minutes before the mule-path joins the Genoa road, which it does to the west of the Hôtel Méditerranée and nearly opposite the Villa Rossi.

The Bridge.—Leave the main road by the Via Piccone, which commences at the Rondo just beyond the Hôtel d'Angleterre. Take the first path on the right, near the commencement of which is a very large and ancient Olive tree. This pathway slopes gently down the valley and in about twenty minutes brings you to a small single-arched bridge whereby the torrent is crossed. The ascent on the other side is somewhat steep, and the path appears only to lead to a few small houses, but still it serves to add length to the walk. Before crossing the bridge a small path ascends beside the stream on the left; this may also be followed for a short distance. This forms a very easy and sheltered walk, suitable for an invalid. The valley is very pretty, abounds with wild flowers, including the Narcissus Italicus, Tulipa præcox, Viola odorata, and many others; it presents at this season of the year, the middle of March, a particularly green and fresh appearance, owing to the terraces being everywhere

covered with the young blades of the wild or self-sown Oat, which springs up each successive year and is met with not only in the Bestagna, but more or less abundantly in all the other valleys, clothing them with verdure and making them appear at a little distance as though they were carpeted with grass.

THE MARTINO VALLEY.

The Chocolate Mill. The Corn Mills. Verezzo.

This is one of the most accessible, sheltered and frequented of the valleys on the east side of the town. Leave the high road by the path which runs beside the Pension Rose nearly opposite the western gate of the Hôtel Victoria; a little way up, the path branches into three: the left leads to the Bestagna Valley, the middle one to the little chapel of Villetta, the third to the right being the one to be followed. In a few minutes a footway is noticed branching off to the right, and marked by a stone having a swallow painted on it; this path gradually leads into the valley, there being from it a very pretty view of the eastern side of the bay, of the Madonna della Guardia, and of the mountains forming the eastern portion of the San Remo amphitheatre, and by it the Chocolate Mill may be reached, although it is not the regular or most convenient path to it. Do not at present follow this, but continue on the main path; in a few minutes a shrine is passed and further on a second path is noticed on the left, which is the right path to the Chocolate Mill. Do not take this, but still keep to the main path. This for a short distance is furnished with steps, is in parts very steep, and gradually ascends to a considerable height, running along the eastern side of the spur, which separates the Martino and Bestagna Valleys, and after about an hour's climbing it emerges above the region of the Olive trees, and near the eastern side of the

hill, the western side of which was traversed on the return journey from the Croce di Parà. On the whole of this route, to near the summit of the hill, wild flowers abound, the Narcissus, Tulip, Grape and Oriental Hyacinths, with here and there a patch of Gladiolus not yet in flower, the terraces being everywhere made verdant with the wild Oat.

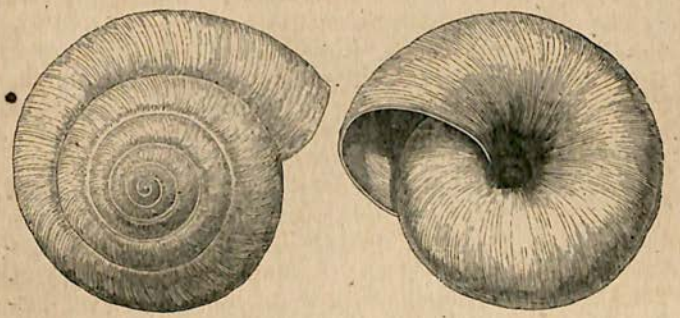
Turning round and facing the south, before quitting the Olive trees, and at a little distance from the summit of the hill, a good view is obtained of the sea, and on the left of Capo Verde with the Madonna della Guardia and the square tower of Poggio, while on the right, through the trees, there is a glimpse of the church of San Pietro.

Ascending now still higher up the hill, we are once more in the region of Rosemary, Myrtle, Juniper and Broom, and from this position a still more extensive prospect opens out to view; looking across the Valley of San Martino the church of Sant' Antonio is seen, but not Verezzo, or the church of San Donato, while behind, the church of San Pietro standing near the head of the valley also forms a conspicuous object. Should a still longer excursion be desired—but the one already described is both too long and too steep for invalids, unless they are mounted, and even then it is attended with considerable fatigue—the hill may be skirted either on the east or west side and the Croce di Parà reached, when, turning down to the right, the return home may be effected by Verezzo, or to the left by San Pietro or even San Giovanni: in most cases however, it is best to return by the same path, which is steep and narrow until the broader mule-path is reached. On the way I picked up some very fine land shells of the genus Zonites, Z. algirus L., two of which are shown of the natural size in the annexed wood-engraving (fig. 8). There is no land shell in England which can be compared with this in size. Among the many Butterflies seen was a 'Red Admiral,' doubtless a relic of the winter, already on the 12th of March over and passed in this favoured climate.

The Chocolate Mill.—Turn up the mule-path beside the Pension Rose, pass the pathway marked by the stone

with a swallow on it, also the shrine further on, but take the next path to the right, which is reached in about twenty minutes from the main road; near the commencement of this are two Reservoirs and a single Palm tree

Fig. 8.



and a few yards further on a notice board with an arrow pointing in the direction of the Chocolate Mill, where you arrive in about ten minutes. The mill is the property of Signor Rubino of San Remo, and visitors are invited to inspect it. There is here an old archway through which the water trickles, and under which the Maiden Hair and other Ferns grow. The stream may here be crossed by an aqueduct, the view from the other side is very pretty and picturesque, and one which a realistic artist would delight in. First there is the little murmuring and somewhat pent-up stream making its way over the rocky boulders which form its bed; then the aqueduct with its several arches, and the mill tinted a pink colour with its large wheel over which the water is rushing.

The mill with its pink walls and green shutters stands out in strong contrast against the dark green of the Olive trees, the sombre hue of which is still further relieved by the yellow colour of the fruit-laden Lemon trees, the bright pink blossoms of the Almond and the pure white flowers of the Cherry trees. From this point a steep ascent occupying about a quarter of an hour may be made, but this

should not be attempted by an invalid. The narrow rough steps by which the ascent is accomplished are exactly opposite the wheel of the mill; at the top of the steps a path runs right and left, and from both of these, but especially from that on the left, good views may be obtained. Following the left-hand path the valley is seen to great advantage, with in the distance the church of San Donato, while above the valley rises Bignone steep and massive.

From this point, keeping on the right or eastern side, the ascent of the valley may be made to Verezzo and so round to the Croce di Parà and home by Villetta or by San Pietro or San Giovanni, but these are very long excursions. In most cases it is best to recross the stream and return by the Chocolate Mill; the excursion is then a very pleasant one and quite within the compass of most invalids. After crossing the stream wild flowers again become abundant, especially the scented Violet and yellow Narcissus.

The Corn Mills.—A few minutes after passing the Victoria Hotel, take the mule-path to the left, it is on the town side of the bridge over the Martino Valley with a small building at the eastern corner; follow this for a short distance, when an old mill will be reached, close to which is another mill with a water wheel and near this an iron gate through which the path passes and which in about ten minutes ends at the stream. The valley here is very pretty, being full of Lemon, Almond, and other fruit trees and the terraces are clothed with wild flowers. The return must either be made the same way or by mounting to the mule-path which leads from the Chocolate Mills. This is a very easy and suitable walk for an invalid, especially if the ascent to the upper mule-path be avoided; when however that is reached and a somewhat longer excursion is desired, the walk may be continued on to the Chocolate Mills.

Verezzo.—Cross the bridge on the Genoa road beyond the Hôtel Victoria and take the mule-path immediately to the east of the small house, Villino Bensa. The path is steep and rough but after ascending for a few minutes there

is a beautiful view; on the left, of the town, with its port, the Madonna della Costa, Capo Nero, the churches of Colla and the higher mountains beyond and on the right, of Capo Verde and the Madonna della Guardia. The path now becomes less rough and there is a good view up the valley of San Martino, the churches of Sant' Antonio and San Donato being seen in the distance, while on the right is the Vallée des Oliviers with the Ceriana road on its further side; in a few minutes a branch path is given off which leads down into this valley: do not take this however, but continue the ascent of the San Martino Valley; in about thirty-five minutes after leaving the high road a shrine is reached and another path given off which also leads down into the Vallée des Oliviers; pass this, and keep straight on; the view of the valley of San Martino as we proceed becomes still more interesting, the chapel of San Pietro appearing on the crest of the ridge on the other side of the valley, and the handsome church of San Donato now standing out in bold relief. Ascending a few steps on the right a good view of the Vallée des Oliviers is obtained and, across it, of Bussana, apparently perched on the edge of a steep cliff. Continue on the mule-path which leads to Verezzo for a considerable distance further; although gradually ascending and increasingly rough and rocky, it cannot be missed or mistaken for any of the lesser paths which branch off from it. At length a hill is reached, above the region of the Olive trees, distinguished by a solitary fir tree growing on one side near the top. The path to Verezzo skirts the western side of this hill, but before rounding it a smaller path is given off on the right leading down the Vallée des Oliviers, which here apparently terminates, the windings of the Ceriana road being seen across the valley and Bussana once more forming a conspicuous object in the landscape. Skirt now the western side of the hill, from which a truly grand view is obtained embracing the church of San Donato, the Croce di Parà, the tower on the ridge of Il Poggietto and the mighty Bignone with other lofty mountain peaks. From this point the distance to Verezzo is not very great, and the

return home may be made by the Croce di Parà and by Villetta, or by San Pietro, or San Giovanni, all long excursions; but a shorter way and one not yet described is by the Vallée des Oliviers.

THE 'VALLÉE DES OLIVIERS.'

Return to the path already referred to under 'Verezzo,' as leading down from the head of the Vallée des Oliviers, descend by it; it is very steep and rough, but is particularly interesting in consequence of the number, size, and beauty of the Myrtle, Juniper, Rosemary and other shrubs which help to cover and give verdure to the rocks. In a few minutes the Olive groves are once more entered, and the small clear stream reached. While in one or two spots in the valley of San Martino the air was scented with Wild Thyme, not yet in blossom, here it was perfumed with the odour of Violets, growing in such profusion as literally to carpet the ground. On some of the moistened rocks beside the stream, Maiden Hair fern was found in large quantities, the fronds being finer than any I had seen before. Cross now the stream to a pathway which leads along the eastern side of the valley; in a little time a shrine is reached where a branch path is given off leading to the left, this doubtless joins the Ceriana carriage-road which skirts the valley at a higher level; do not take this, but continue up the valley for some distance, when suddenly the path descends towards the stream, which must be crossed again, and in a few minutes more it joins the mule-path already referred to, by which the journey to Verezzo was commenced. Once more San Remo is seen from a most advantageous point of view, Capo Nero and the higher mountains beyond being, as they were then seen, all bathed in the light of a glorious sunset.

Presuming the excursion up the Vallée des Oliviers to be commenced from the foot in place of the head of the valley, the same way would have to be followed, but in reverse order; in this case the excursion might be varied

by taking the path given off at the shrine, now of course on the right-hand side and which leads to the Ceriana road and so home, if a short excursion only be desired; but if a longer, it might be extended by going to Poggio and from thence to Ceriana, or from Poggio across the Valley to Bussana or to the Madonna della Guardia.

CAPO VERDE AND THE CHAPEL OF THE MADONNA DELLA GUARDIA.

The excursion to the Chapel of the Madonna della Guardia situated on the summit of Capo Verde is a particularly pleasant and practicable one; it can be accomplished by most persons of fair walking powers, but invalids should ride there. Go along the Genoa road, until you come to where the railway crosses it; cross the line and continue on the road, which now begins gradually to ascend. From time to time, on the way, look back when a view of San Remo and its surrounding mountains is obtained, a view gradually increasing in extent and beauty until the Cape is nearly reached, where the prospect is really fine. (See Frontispiece.) From this point several of the spurs projecting from Monte Bignone, with the intervening valleys terminating in blind extremities on the side of the mountain are clearly seen. In about forty minutes from the Hôtel Victoria, on the right of the high road a wall or parapet will be noticed running beside the railway, but at a considerable height above it, at the end of this and about a hundred yards from the signal station 125, on the left-hand side of the road is a small shrine; from this is a pathway and another shrine a little distance up it. Be careful however not to take this pathway as it leads only to a small stone quarry, but follow the rough mule-path immediately above, which however is not visible from the Genoa road owing to this being on a lower level. In a few minutes the Chapel is reached surrounded by a number of tall Cypress trees like sentinels on guard, and here indeed a most extensive and lovely prospect of both sea

and land is spread out to view. Following the coast line on the west, San Remo is seen lying far below, skirted by the ever beautiful Mediterranean, with its white crested waves breaking gently on the shore; beyond this, Capo Nero and Colla with its churches; still further on, the promontory of Bordighera, part of Mentone and, it is stated, on clear days even the Esterel mountains.

Along the coast eastward lie the villages of Arma, Riva, and San Stefano, and far away on the sides of the hills are Pompeiana and Castellaro, while behind the Chapel and on the right side of the valley of Ceriana is Bussana, curiously crowded on the summit of a small hill, and on the left side, Poggio, both of these towns standing out with marvellous distinctness in the clear Italian atmosphere and forming beautiful objects in the landscape.

Still more to the north, not only are the mountains which form the amphitheatre of San Remo spread out before the beholder, but far beyond them, extending eastward, the higher Alps, some capped with snow, the whole forming a panorama of exceeding beauty and even grandeur. Having feasted our eyes with the prospect, having noticed the extent of the Olive groves, and the dense forests of Fir trees stretching even to the summits of some of the mountains, in place of retracing our steps, it is better to cross the ridge to Monte Calvo and to return home by Poggio and the Ceriana road. It should be mentioned that the Madonna della Guardia may be reached by carriage, the road to it branching off near Poggio.

THE VALLEY OF CERIANA.

Poggio. Ceriana.

The valley of Ceriana lies to the east of the Madonna della Guardia, between it and the valley of Taggia; it does not, therefore, form one of the valleys of the San Remo amphitheatre, but it is so close to it and to the Vallée des

Oliviers that no description of the excursions in the neighbournood would be complete if it did not include the Ceriana Valley. A very good view of this valley is obtained from the Genoa road, and looking up it from that point the towns of Bussana and Poggio are seen, occupying conspicuous positions and either may be reached by pathways leading up the sides of the valley. Usually however the excursion to Poggio is made by the Ceriana carriage-road and that to Bussana by crossing the valley from Poggio.

Poggio.—As has been already stated there are but few roads available for carriages in the neighbourhood of San Remo; one of the principal of these is that to Poggio and thence to Ceriana. The road to Poggio turns off the Genoa road on the left about a quarter of an hour's walk from the Hôtel Victoria at the Villa della Madonna; from this point it gradually ascends all the way until Poggio is reached, the distance being accomplished in about an hour and a half at an easy walking pace.

The road skirts for a short distance the Vallée des Oliviers, through which flows a stream, the murmur of it pleasantly reaching the ears; suddenly the valley becomes very narrow, the road crosses it by a bridge and, turning abruptly to the right, continues for some little distance along the opposite or eastern side of the valley. About five minutes after crossing the bridge, a pathway will be seen on the left, and a few yards further on a second pathway, this describes four short, sharp zigzags and leads up to the small chapel of San Rocco, from which the pedestrian may reach Poggio by a shorter and steeper way. Pass the chapel to where four paths branch off near a cottage, the one to the right brings you to Poggio on the left of the square tower. While on the ridge you have on the left the Vallée des Oliviers, beyond, the Martino Valley, some of the houses of Verezzo and the tower of San Donato, while on the right hand is Monte Calvo and the Madonna della Guardia. On the west the Chapel of Villetta is seen.

Should the traveller prefer the route to Poggio by the high road he must of course not take the pathway which leads up to the Chapel of San Rocco, but must follow the road for a short distance, when it turns to the left and runs in a westerly direction. From this part of the road the sea is plainly visible with its waves continually rolling in and breaking on the shore in white foam, with a sharp and refreshing sound.

After a little while a small stone quarry is passed and immediately afterwards the end of a small valley is crossed by a bridge with several arches; after this the road makes several abrupt turns, gradually ascending until Poggio is reached. The hill sides on this route are thickly clothed with fine Olive trees, a few Lemon trees being also occasionally seen low down. On the way I came across a group of small fir trees; on one of these I noticed the little nest of the Processional caterpillar, the first I had seen in the neighbourhood of San Remo, and the history of which has been given in a previous chapter. As an evidence of the mildness of the climate and of the little injury done by the late unusually severe weather, I may mention that in one spot I noticed several Rosemary bushes in full blossom on this the 4th of January, 1879, and around these some butterflies were on the wing. Another evidence of mildness was afforded by beds of broad beans about two feet in height and of peas in an equally forward state.

On turning round just before entering Poggio, a glorious view meets the sight; on the right a ruined chapel and the square tower of Poggio are seen, while low down San Remo with its bay lies spread out at our feet, and above are Capo Nero, Colla and the mountains forming a portion of the San Remo amphitheatre. From the chapel itself the views are very fine; one is across the broad and open valley of Ceriana to Bussana, which stands boldly and picturesquely on a plateau near the edge of the curiously scarped rocks which here form the eastern side of the valley. Casting the eye around, the peaks of nearly all the higher mountains which form the protecting amphi-

theatre of San Remo are seen, and looking up the valley of Ceriana a snow-clad mountain with its pointed summit comes into view.

Near the ruined chapel are two pathways and a narrow carriage-road, one path encircling the sea front of Monte Calvo, which is here seen to be almost entirely of schistous formation and the bare western side of which is scored with deep furrows occasioned by several small streams running down the face of the mountain at the period of great rainfall: the other, which is broad, paved and in places provided with steps, winds round the back of the mountain; following this for two or three hundred yards a large iron cross is reached from which the path descends to the Madonna della Guardia, of which a good view is obtained from this point as well as of San Stefano on the shore line to the east; the distance to the Madonna is but short and it is better to return home by it than to retrace your steps, this you can do either on foot or in a carriage and the views from the Chapel are even finer than those from Poggio. Another excursion which may be made from this point is across the valley to Bussana, but this involves a sharp descent and a steep ascent. The villages of Poggio and Bussana stand like protecting fortresses on either side of the valley guarding its entrance.

Poggio itself is entered by a short street, in which the usual slender arches are replaced by some so deep and high as to contain within each a separate room with a window on either side looking up and down the street; this is the most noticeable architectural feature of the town, but we observe here, as in most other places on this coast, narrow steep streets with frequent stone steps, numerous archways and the steepest possible flights of stairs leading up to the rooms occupied by the inhabitants.

Ceriana.—After passing through the town of Poggio the view of the surrounding mountains and up the Valley of Ceriana becomes very beautiful, and the murmur of a not inconsiderable stream reaches the ear.

In a short time the road touches the Vallée des Oliviers, and at a shrine on the left a pathway is seen going down into that valley; and very soon afterwards another on the right leads into the valley of Ceriana. The road now quits the Ceriana Valley and skirts the Vallée des Oliviers for a long distance, the view into and across which is very beautiful. In a little while the road again approaches the Ceriana Valley, which now becomes narrower and, on looking down it, the windings of the stream along its whole course until it reaches the sea are plainly visible. The road then runs along the western side of the Ceriana Valley for some miles, gradually ascending all the way until it reaches a great elevation, the prospect expanding and becoming increasingly lovely; the sides of the valley are thickly clothed with Olive trees and the summits of the hills and mountains more or less covered with Firs. Scarcely a house is to be seen along the whole of this valley. We are now approaching the town of Ceriana, a small waterfall is passed, from near which a still more extensive view of the course of the stream is obtained, with Bussana and Poggio on either side of the valley; the road shortly afterwards begins to descend and, after a few further windings, *Ceriana* suddenly stands before us on the side of a protecting hill, a spur of Bignone one of the ascents of which is made from this place. The town looks well from a distance, but an inspection is somewhat disappointing as it presents but few architectural features of interest or beauty. The church is of great antiquity. As the road along the valley rises above the region of the Olive trees the vegetation becomes more varied and interesting; the Myrtle is met with in large quantity, Pistacia Lentiscus, Coriaria myrtifolia L., Rhamnus Alaternus and several other shrubs and evergreens, including the Mediterranean Heath now in the full beauty of its blossom, and perfuming the whole air with its sweet and delicate odour.

Near to Ceriana the vine is extensively cultivated, frequently on terraces, and a little way from the town itself there are great numbers of fine Spanish Chestnut

trees, San Remo being largely supplied from them with this, amongst the Italians, favourite and staple article of food. Among the wild flowers on the way to Poggio, the snow-white Star of Bethlehem, Ornithogalum umbellatum L. with its flowers fully expanded under the influence of the warm sunshine, and Adonis æstivalis with its pretty little cherry-coloured blossoms, were frequently noticed. Butterflies were seen along the whole route on the 11th of April in countless numbers; the chief kinds were the Clouded Yellow, Colias edusa; the beautiful Sulphur coloured Rhodocera rhamni, and the Swallow Tail, Papilio Podalirius, but the number met with of these kinds was few compared with the Painted Lady, Pyrameis cardui, of which there must have been many hundreds, flitting about in all directions, particularly on the blossoms of the Wild Thyme. This is one of the most active and hardy of Butterflies, the first on the wing in the morning and the last to go to rest in the evening, being found especially where the rays of the setting sun linger longest. It is not an uncommon circumstance to see these Butterflies flying about in the rain in search of food, the more necessary to them in consequence of the great activity of their habits. It is the only species I know which braves the rain, and in doing so it incurs no little danger, for when a heavy and sudden shower comes on, they are overwhelmed and perish in large numbers. Another of its peculiarities is the disposition it exhibits to settle on roads, pathways and walls. When leaving the town of Ceriana as the afternoon set in, I noticed that all the Butterflies of this species flew in one direction, namely down the valley; not one was to be seen going up it; the reason for this was, I imagine, to seek a warmer temperature to rest for the night. It will be remembered that the Painted Lady is one of the few Butterflies which survived the late severe winter; another kind, even hardier, was the Red Admiral, but strange to say not a single specimen of this is now to be anywhere met with, nor indeed have I seen one for some weeks. The time to see Butterflies in the greatest

numbers and to the best advantage is early in the morning, when they are busy feeding; one then finds out the flowers they like best and as they are far less wild and restless, they are seen in all their beauty: later in the day they become much wilder and seem in fact to be simply enjoying the freedom of their sunny lives, taking long flights without settling.

If the traveller be on foot, the return home from Ceriana may be made along the opposite side of the valley, or retracing his steps by the Ceriana road as far as the shrine and the pathway already noticed near to Poggio, he may follow this path and it will bring him first across the Vallée des Oliviers and then along the ridge which separates that valley from the Martino Valley, the Genoa road being gained at the Villino Bensa. Care must be taken not to miss the right path; there is one on the left which runs for some distance but leads only to some cottages. This excursion is a very long one and whether made on foot or by carriage, occupies the greater part of the day; it is one of the finest however in the neighbourhood and should certainly be taken. The best time for it is about the end of April or beginning of May, when the vines and Chestnut trees near the town are in full leaf.

THE VALLEY OF TAGGIA.

Taggia. Castellaro. Madonna di Lampeduza.

Seeing some very fine Oranges and Lemons in the market at San Remo, I enquired where they came from and was told Taggia; this at once gave me the desire to see that place. and I determined to time my visit before all the oranges had been gathered. The excursion to Taggia is one which should on no account be omitted, not only from the ease with which the valley and town may be reached, but from the interest and beauty attached thereto. Taggia is about 6 miles from San Remo and is on the western bank of a broad valley of the same name running, as do nearly all the valleys in this part, north and south. You may

drive, or go by railway, the station for Taggia, just beyond the little village of Arma, being reached in a few minutes from San Remo.

The walk from the station up the valley by the broad carriage-road is particularly pleasant, running as it does through forests of very fine Olive trees, planted with considerable regularity on a level, instead of in terraces as is usually the case, the ground beneath them being thickly covered with grass, the whole presenting a stately and park-like appearance. After about three quarters of an hour's walk the Chapel of the Campo Santo is noticed and a little further, on an elevation, stands the large Church of the Dominicans. Looking into the valley as we approach Taggia we obtain first glimpses, and afterwards the full and glorious sight of groves of Orange trees of great size and beauty literally laden with golden fruit half concealed in the rich dark green foliage. Indeed in this part of the valley Orange trees equalling in size the largest Apple or Pear trees meet the eye everywhere, each bearing hundreds of oranges and growing too in the open valley without any special protection; to such an extent do they abound here that it might be well termed the Valley of Orange trees. Not only are Orange trees seen here, but innumerable very fine Lemon trees, bearing abundant crops of large-sized lemons; then the Vine is largely cultivated, it being so trained as to form long covered walks, the fruit hanging temptingly from the trellis work overhead. To complete the picture of this fruitful valley we must not forget to notice the dense groves of Olive trees which clothe its sides, with lofty Cypress trees rising above them here and there; while in and near the broad stream which runs through the valley are large beds of Bamboos or canes attaining a height of some 15 or 20 feet, as also numerous trees of the Golden Willow, now bare of leaves, but the bright yellow coloured stems of which yet impart character and warmth to the scene.

The approach to Taggia is very pretty. On the eastern side of the valley before descending into the town, the village of Castellaro with its churches is seen high

up, occupying a commanding situation; the hill side being clothed with Olive trees to the base of the town. At a little distance from it, but more to the north and at a still greater elevation, stands the Chapel of the Madonna di Lampeduza, from which there are very extensive views.

Entering now the town of *Taggia* one is much struck with its quaint appearance, it being even more curious than San Remo, though there is much in common between the two; the number of arches thrown at intervals across the streets is even greater than in San Remo; in one short street I counted as many as eleven, proving that the fear of earthquakes at the time Taggia was built was as strong there as at many other towns of the Riviera. Some of the streets are even more remarkable than any met with in the old town of San Remo, as the Via Soleri, on either side of which runs a broad and rather handsome arched and pillared corridor under which are some of the principal shops. At the corner of this street is the house formerly occupied by the mother of Ruffini; here he spent some of his earlier years and still resides from time to time.

The practice extensively prevails at Taggia of hanging branches of trees over the doorways; in general this is confined to wine shops, and branches of the Fir tree are selected, but here shops of other descriptions are also thus distinguished, the branches being those of the Olive or Bay tree.

Taggia contains several handsome churches, which are evidently more cared for than are many of those in the neighbouring towns. It is to be regretted that I could not meet with any photographs of the many architectural curiosities of Taggia. I must not forget to refer to the Palace, which formerly belonged to the Marquis Spinola; this must at one time have been a very fine building; it is now however in a state of dilapidation and ruin, the habitable portion being used as an inn, the Albergo d'Italia. This once beautiful palace affords another of the many striking illustrations of departed greatness met with in nearly every town in Italy.

Leaving Taggia by the bridge we crossed the Argentina stream which here is really considerable, its bright blue water flowing down the valley with great rapidity and imparting to it the fertile and fruitful character for which this valley is remarkable. The bed of this stream is of great width, and over it are strewn large masses of waterworn rock; these have been brought down from the surrounding mountains during periods of flood; in this way, in the course of centuries, the bed of the river has been undergoing a gradual process of elevation, and the sea, which it is affirmed formerly flowed up the valley as far as Taggia, has been forced back. Francis the First after the battle of Pavia in 1525 is said to have embarked from Taggia for Spain.

The bridge which crosses the valley at Taggia is a very long and curious one; it consists of many arches of strangely unequal sizes, and what is more singular is, that the bridge does not run straight across the stream, but makes a considerable bend, this may have been given to it to secure a more convenient landing place on the other side or to afford the buttresses greater power to resist the force of the water at the period of floods. Near either extremity of the bridge are shrines; that close to the town is in marble and represents the Holy Mother and Child with two attendant apostles holding clasped missals. The other is a painted picture so much worn by time that the subject can scarcely be distinguished. I could make out a Ship in flames and a small boat in the foreground. It was while sitting on this bridge that Ruffini, gazing on this pleasant and peaceful valley and inspired by the beauty of the surrounding scenery, first conceived the idea of 'Doctor Antonio,' the most famous and touching of all his works.

It is from the eastern side of the bridge that the excursion to *Castellaro* and thence to the *Madonna di Lampeduza* is made. There is no regular road to either, but only a mule-path, and they seem so pleasantly perched upon the mountain side that it is hard to resist the temptation of paying them a visit at once. From both

places there are splendid views, that from the Madonna cannot be better described than by Ruffini in 'Doctor Antonio.'

Along the eastern or right side of the valley, there is a road which extends even to Turin, and a very beautiful excursion may be made by it as far as Badalucco, so named, it may be presumed, from the resemblance of the scenery to that around the Baths of Lucca. There is also a path to the right of the bridge; on one side of this path are a number of curious bath-like tanks intended to store water for irrigation, on the other is a low stone wall through which water trickles and where Maiden Hair and other ferns are found growing in abundance. I did not however pursue this path any further, as the warm and sunny day, the 24th of December, devoted to the visit to Taggia was now drawing to a close and it was necessary to commence the return journey, which we did with great reluctance for the day had passed very pleasantly in this smiling valley. Once more crossing the bridge we returned to the station by the same road; on the way we heard the repeated reports of guns in the Olive groves just at the time when the poor little birds were seeking their usual roosting haunts; waiting at the station for the train, no less than six of these 'chasseurs' entered it on their way to San Remo. It was pleasant, however, to turn from these slayers of feathered songsters, tomtits, robins, &c., to a gentleman bearing in his hands a small tree cut off near the roots and laden with ripe oranges; this was intended to be converted into a Christmas tree, and a very handsome and effective one it would make.

I will now describe the western side of San Remo.

THE SAN ROMOLO VALLEY.

The West side of Valley. Across the Bridge. The Madonna del Borgo. The East side of the Valley. San Romolo. Piano del Rè. Monte Bignone.

The greater part of the old town, as already mentioned, is built upon the extremity of the ridge or spur which separates the Valle di Francia or East Sanctuary Valley, from that of San Romolo or West Sanctuary Valley, this ridge forming the principal route to San Romolo. A small portion of the town however is on the western side of the San Romolo Valley and hence by some writers San Remo is described as being built upon two hills. A stranger on first arriving here would experience no little difficulty in discovering the termination of this valley and the final course of the stream which runs through it; this arises from two circumstances; first because the end of the valley is concealed from view by the houses of a portion of the old town, and second, since the stream itself at the same spot has been arched over and built upon.

The San Romolo Valley forms no exception to the general rule; it cannot be entered on the level and in order to reach it it is necessary to climb up a considerable height and to seek out paths known only to the initiated, in fact to incur an amount of fatigue far beyond the powers of most invalids; this is the more to be regretted since the valley is one of the largest and prettiest of those included in the amphitheatre of San Remo. The best way to reach it is as follows.

The West side of Valley.—Enter the old town nearly opposite the Villas Carli and take the first turning on the left out of the Via F. Corradi; after a steep ascent this brings you to an open space just above the Public Gardens. A few yards to the west a small shrine with a figure in marble will be seen; this marks the commencement of the paved mule-path which leads to San

Bartolomeo, distant about a mile and a half: a few yards further on, this path passes behind a small castellated house; follow it on for twenty minutes when a small dilapidated shrine will be noticed on the right. Before reaching this several small pathways are seen apparently leading into the valley; it is of but little use to follow any of these, as they only penetrate for a very short distance. One or two pathways will also be observed on the left leading towards the Foce Valley and just before the shrine is reached, another mule-path diverges from the San Bartolomeo path which apparently leads to the same valley; but more of this hereafter. From this shrine a very good view of the sea and coast line as far as the Madonna della Guardia is obtained. Leave now the mule-path and take the small path on the right which leads down into the San Romolo Valley, this descends in a winding manner for a considerable distance and from it there is a fine view of the valley and of Monte Bignone. As the bottom of the valley is approached, the sound of the rushing water of the stream greets the ear, the stream itself being very soon reached; the path is here apparently lost but following the stream downward for a few yards it is again met with, its continuation being visible on the other side, to which you can easily cross by stepping from rock to rock. On the other side, there is a good mule-path both up and down the stream; following that which leads towards the town, flourishing groves of Lemon trees are passed through, their bright green leaves standing out in vivid contrast with the soft, blue-grey foliage of the Olive trees clothing the opposite side of the valley; the pathway here is remarkable for the number of well preserved shrines along its course, it runs below the Hospital for Lepers and enters the old town by the San Giuseppe gateway. This is a very pretty excursion, the Lemon trees so abounding in some parts of the valley that it might be appropriately called the Lemon Valley.

Across the Bridge.—Leave the town by the San Giuseppe gateway and turn immediately down the path on the left, which descends towards the river; in a few

minutes this is reached and the pathway divides, one path running up and one down the river, that to the left leads to an olive mill, from which the stream may be crossed by a narrow bridge; that to the right conducts to a larger bridge which also spans the stream, on the other side of which a pathway ascends and joins that from San Bartolomeo, by which the return home may be made. Between the two bridges on the opposite side is another small olive mill and a third mill a little way higher up the stream which may be visited before making the ascent to the upper path; here an aqueduct crosses the stream, which may also be used as a bridge, but it can only be reached through the mill. From this point there is a good view up the San Romolo Valley.

The Madonna del Borgo.—Ascend through the old town to the Madonna della Costa; continue on the San Romolo road for about half an hour, when the shrine with the broad blue border will be reached; from this a mule-path branches off on the left, leading gradually down into the valley. Follow this for about a quarter of an hour, when a small path will be noticed going still further down the valley at right angles with the mule-path, this, in a few minutes turns somewhat sharply round to the left, and, after skirting a large reservoir, joins a small stream which runs for some distance between moist stone embankments, which are covered with Ivy and three different kinds of Ferns, including the Maiden Hair fern. This path in about fifteen minutes from quitting the upper path joins the lower mule-path of the San Romolo valley; this on the right leads for two or three miles up the valley, and on the left after passing the Chapel of the Madonna del Borgo, to the San Giuseppe gateway of the old town. In five minutes after passing the Madonna del Borgo, a small pathway is seen, which leads to an olive mill, from this there is a bridge, with, on the further side, some maccaroni mills; the bridge cannot be crossed however, as the mill is shut up, and access cut off from it by a gate which is kept locked. By continuing along the lower path for about another

ten minutes, an aqueduct is seen which crosses the stream by a single arch and which leads to a picturesque old mill and water-wheel which is well worth a visit. Here the view up the valley is very fine and the torrent, swollen by recent rains, rushes along with great force amongst the large boulders which obstruct its course. Near the mill-wheel and the mill itself I observed a greater variety of ferns than I have met with in any one spot elsewhere, the Lycopodium denticulatum being also found there. In place of recrossing the stream by the aqueduct, which is narrow and high above the water, it is better to take any small paths you can find, and to return on the western side of the valley; by the San Bartolomeo path the first part of this walk, notwithstanding the difficulty sometimes experienced of finding a foot-path, is particularly pleasant as it abounds with a variety of wild flowers to a greater extent than I have hitherto seen. Here I found for the first time, on the 24th of March, many bushes of Coronilla Emerus L., in full flower. The maccaroni mills may of course be reached from the San Bartolomeo path and the crossing of bridges thereby avoided.

The little excursion to the Madonna del Borgo is very pretty and were it not for the steepness of the ascent through the old town and as far as the shrine, it would be an easy one; the walk through the valley is particularly pleasant, many flowers are seen, including the pure snowdrop-like and graceful Allium Neapolitanum, and the small Grape Hyacinth, both of which are met with in large quantities, as well as Borage, with its bright blue blossoms; the latter indeed occurs in most of the valleys. The valley of San Romolo, when this excursion was taken, was at the height of its beauty, that portion of it near to the mule-path leading to San Remo abounding in Lemon trees laden with fruit, with Almond and other fruit trees then covered with their pink and white blossoms.

Instead of turning down into the valley by the pathway beside the shrine with the blue border, the walk may

be extended by keeping along the San Romolo road for a greater distance before entering the valley, but since the prettiest part of this is along the lower mule-path, the easiest way is to make for this at once after emerging from the San Giuseppe gateway, the ascent to the Sanctuary being thereby avoided.

The Eastern side of the Valley.—Emerge from the old town by the Porta San Giuseppe, close to which is the church of the same name. From this point there is a good and tolerably level mule-path, which runs along the right side of the valley for two or three miles; this passes at first below the Hospital for Lepers, and along its course at short intervals are a number of well-preserved shrines. In a few minutes the pathway leading down to the stream is seen, by which the short ascent was made after crossing the stream from the other side as described in the 'Walk on the Western side of the Valley;' continuing along the mule-path, in a few minutes more the Chapel of the Madonna del Borgo is reached; from this point the pathway winds along the valley for some miles, gradually ascending and disclosing many charming views of the torrent, of its rock-encumbered bed, and of the distant mountains. The pathway through this valley is one of the best I have met with, and since it keeps for a long distance well down in the valley, the views obtained are of a different character from those of other valleys in which the pathways run on a higher level, and as there is not so much climbing the excursion is made with less fatigue. The whole route is very interesting. The San Romolo is the most considerable of all the valleys of the San Remo amphitheatre; the stream running through it is of greater volume, and its bed thickly strewn with huge waterworn boulders and masses of rock, brought down from the higher mountains by agencies far more powerful than any of those now in operation. Everywhere along the valley, the Lemon tree is now, the 9th of March, seen bending under the weight of its fruit, as well as the delicate pink blossoms of hundreds of Almond trees, and occasionally the white blossom of Thorn and

Cherry trees. Wild flowers are not so abundant in this as in some of the other valleys, but the scented Violet, the yellow Narcissus, the little Grape Hyacinth, with its fruity plum-like perfume, the blue Salvia, and some other kinds, are frequently met with.

San Romolo.—This is reached by the road which runs at the top of the ridge which separates the San Romolo and San Francia valleys; in about forty minutes from starting the Chapel of San Giacomo is passed; a little further on the road leaves the San Francia and skirts the San Romolo Valley; the ascent is gradual and the road describes many turnings and windings, and several shrines are passed on the way. In about an hour and a half the last Olive trees are reached and are succeeded by a vegetation altogether different; the mountain sides are now clothed with Fir trees, the spaces between being thickly covered with Prickly Broom, Mediterranean Heath, Lentiscus, many trees of Blackthorn so beautiful in the early spring and a great variety of other shrubs and plants. The Prickly Broom here especially abounds, and it must be a glorious sight to see the mountain sides ablaze as it were with its golden blossom.

About half an hour before reaching San Romolo, a few scattered houses surrounded by Chestnut trees are seen on the other side of the valley; this is the hamlet Borello; it is reached by a pathway which leads down into the valley, crosses the San Romolo stream and in a few minutes brings you to the hamlet. Continuing on this pathway and leaving Borello on the left you reach in about a quarter of an hour a small open space where the road divides, the path to the right conducts to the Bevino spring. That to the left leads to the house which was once the residence of the late Dr. Rose. From the Bevino spring, San Romolo, San Bartolomeo or Colla may be reached; keep up the hill for a few minutes, this will bring you to a broad mule-path which if followed on the right leads in half an hour to San Romolo and on the left to Colla, but it takes two hours to get to the latter place. The way to the Chapel of San Bartolomeo, which is situa-

ted on the ridge, separating the San Romolo from the Foce Valley, is not easy to describe clearly. Follow the broad mule-path just referred to on the left for about a quarter of an hour, then turn again to the left, when in half an hour you will come to a little hill where the path once more turns to the left, the descent to the Chapel from this point being very steep. But the places mentioned are not usually reached by the paths I have described; they are merely mentioned here as alternative routes, which may be taken should it be desired to vary the excursions and travel over new ground. The excursion to San Romolo, is usually made by the San Romolo road on which we were before taking the path down the valley leading to Borello, and it is reached in fact in about half an hour from that point. San Romolo lies at the head of the valley which bears its name and beneath the long ridge which unites Monte Caggio with Monte Bignone; it consists of an old and disused Convent, which commands a fine view of the San Romolo Valley down even to San Remo and the sea; of a small Chapel just below the convent, which marks the site of the cell formerly inhabited by the hermit Bishop of San Romolo, afterwards its patron saint, and of a few cottages and houses, one of which is the summer residence of the English Vice-Consul, Walter Congreve, Esq.

At the back of the Convent is a large space with many fine Chestnut trees; here the people of San Remo are very fond of coming in the summer to escape the heat of the town, they bring with them their tents and beds, placing the latter in the unused rooms of the Convent. There is an annual festival held here in memory of the Bishop of San Romolo.

The excursion to San Romolo, although long, is one of the finest in the neighbourhood of San Remo and the most frequently taken of them all, since it is by it that Piano del Rè is reached and Monte Bignone usually ascended. The time, I trust, is not very distant when there will be a good road to San Romolo, as there is to Ceriana; that which already exists is nearly broad enough

for a carriage; such a road would afford a splendid drive and it would make the ascent of Monte Bignone so practicable that thousands would go up the mountain who now would never dream of making the excursion. In order to meet in part the expense of keeping the road in repair, a small toll might be levied upon all who use it.

Piano del Rè is the long and lofty ridge, 3500 feet in height, which unites Monte Bignone on the one side with Monte Caggio on the other; the path leading up to it is that which is usually taken in making the ascent to Monte Bignone from San Romolo; the ridge commands a splendid view of the mountains to the north of the San Remo amphitheatre including the snow-clad Alps. Fine as this view is, I will not stop to describe it in detail, as that from the summit of Bignone is far more extensive and glorious. Lying to the north of the ridge and below it at an elevation of 2000 feet is a plateau of about two acres in extent from which the Pine trees have been partly cleared away, and from this there are fine views; a visit to it is strongly recommended in Mr. Aspinall's little book. It faces due west, takes nearly an hour to reach, and is said to be now so overgrown that the prospect is not nearly so good as it was formerly. By continuing along the ridge and traversing it from one end to the other nearly the same views are obtained as from the plateau itself. In order to reach the ridge descend for a short distance the pathway by which San Romolo was approached and turn to the left; continue to ascend for some time, making for the eastern termination of the ridge, where it becomes united with Monte Bignone and from which point the pathway is continued up that mountain.

Monte Bignone.—In making the ascent of Monte Bignone it is always safest to be accompanied by a guide; for those who are strong the ascent on foot is the pleasantest, but the road is quite practicable for sure-footed donkeys, although in places it is somewhat trying for those whose nerves are not strong. The whole route is exceedingly beautiful, glorious prospects meeting the eye at almost every turn; the path sometimes traverses forests

of Fir trees, with amongst them innumerable bushes of the bright-leaved Holly, at others it runs along the edges of steep ravines and precipices; many curious and rare wild flowers attracting the eye on the way; till at length after an ascent of about two hours from San Romolo and four from San Remo, the broad, sloping and grassy summit of the mountain is reached. Continue the ascent until its highest point, marked by a stone obelisk, is gained and from which one of the most magnificent prospects imaginable lies stretched out on all sides, embracing an area in some directions of more than a hundred and fifty miles, astonishing and enchanting the beholder. To the south, the glorious expanse of the Mediterranean and in the far distance the island of Corsica with the snowy peaks of Monte Rotondo; on the right Monte Caggio, and the mountains forming the western half of the San Remo amphitheatre, terminating at Capo Nero surmounted by Colla, and the valleys of San Remo and Bordighera; further away, the mountains of the Mentonean amphitheatre, and along the coast successively the various capes and promontories as far as Cap d'Antibes and even the Esterels: on the left the Ceriana and Taggia Valleys, with on the further side of the latter Castellaro and the Madonna di Lampeduza, and Pompeiana and Riva on the sea-shore; while far away to the east are the mountains of the Eastern Riviera, Riviera di Levante, and the Apennines beyond Florence: lastly, to the north is a broad and deep valley, with on the other side a range of mountains still loftier than the one on which we are standing and above these again, the snow-capped Alps stretching away in the one direction towards the Esterels, and in the other to Turin. Looking now more closely into the valley below, on a narrow ridge on the near side of the valley is seen the town of Perinaldo, and on a hill on the opposite side, Apricale; both of a singularly deep red hue, from the fact that the tiled roofs only of the houses are seen from this great altitude. The town of Bajardo, lying more to the right, is not visible from this point of view, although it is described by Aspinall as being seen from the plateau, Piano del Rè.

There is a pathway leading down to Bajardo and thence to Pigna, where accommodation at a small but clean inn may be had for the night; the return home can then be made by the Nervia valley and Bordighera, altogether a most beautiful and varied excursion.

It is impossible to convey in words anything like a correct idea of the splendour of the prospect on a clear day from Monte Bignone; it must be seen to be appreciated; it has been described as one of the finest in Europe. The excursion is one which may be safely undertaken with ordinary precautions and is within the compass of any person of fair health and strength. An additional charm consists in the number of rare and beautiful wild flowers, which are different from those found at a lower elevation. Amongst the most noticeable of these is the blue Hepatica, Anemone Hepatica L., a pink variety of which is sometimes met with, the pink cyclamen-like flower, Erythronium Dens Canis L. with its trefoil-like and spotted leaves; in shady places the Primrose, Primula acaulis All.; everywhere over the summit of the mountain the Cowslip, Primula veris; two species of Gentian, Gentiana verna and G. acaulis L.; Ophrys fusca Link, also a species of Asphodel, Asphodelus albus Willd. which however was not in blossom at the time of my visit; Saxifraga cuneifolia; Sempervivum arachnoideum L.; and lastly, in shady dells, Daphne laureola L. With two or three exceptions, these flowers were found in blossom at the end of April, but they had been so for some weeks previously. On my way up the San Romolo Valley I noticed many plants of Helleborus fœtidus L. as also for the first time in flower, the large and handsome pink Cistus, C. albidus L.; this is the species which is so commonly found above the region of the Olive trees, which by its abundance helps to clothe the rocks in many places, and when in full flower it must present a very handsome appearance.

The descent was made by the ridge of Il Poggietto, the Croce di Parà and the Chapel of San Pietro, San Remo being entered by the new road which runs beside the Madonna degli Angeli. The scenery is very beautiful all

the way, the view across the valley of San Martino of Verezzo with its churches being particularly pleasing. The descent of Monte Bignone is not unattended with risk, and severe falls are frequent; the safest course is not to ride, but to walk down the roughest and steepest places. The donkey men, whenever they can, send boys with you instead of going themselves.

THE FOCE VALLEY.

Chapel of San Bartolomeo. Chapel of San Lorenzo. Descent of the Mossè and Foce Valleys. Walk in the Foce Valley.

The next valley to the west is the Foce or Lemon Valley; on the ridge separating this from the San Romolo Valley stands the Chapel of San Bartolomeo and hence the first excursion described in connection with the Foce Valley will be to the Chapel of that name.

Chapel of San Bartolomeo.—Ascend the old town by the Via Costiglioli, take the path which leads past the small shrine containing a figure of the Virgin in marble; this very soon passes behind a castellated house and after a short and somewhat sharp ascent, turns abruptly off to the left. From this point, as already stated, one of the best views of San Remo, the Madonna della Costa, and the Hospital for Lepers is obtained, together with Capo Verde, the Madonna della Guardia and the hills and mountains forming the eastern boundary of the San Remo amphitheatre. In a few minutes a path on the right leads into the San Romolo Valley and almost immediately after another path is given off on the left, going apparently into the Foce Valley; then a shrine is noticed on the right and in about five minutes afterwards a second shrine, near to which on the left-hand side is the ruined house referred to in the description of the return journey from San Lorenzo. From this there is a fine view both right and left of the bay of San Remo, of its two promontories, of its encircling amphitheatre of hills and

mountains and of the towns of San Remo and Poggio. In a few minutes more, the mule-path divides, the left hand or smaller division leading into the Foce Valley, and being the path by which the return from San Lorenzo is made, the other or main division leads to San Bartolomeo; it makes a sharp ascent somewhat to the right and very soon a shrine is seen on the left, shortly after passing which there is a very excellent view of both the Foce and San Romolo Valleys, the ridge in this situation being very narrow; another path descends into the latter valley, the ascent again becomes steep terminating in a few minutes at the *Chapel of San Bartolomeo*; the journey thus far having occupied, with some short delays on the way, about an hour and a half. Looking across the Foce Valley the Chapel of San Lorenzo is seen and across the San Romolo Valley that of San Giacomo. In about ten minutes from the Chapel a path branches off on the left to the Foce Valley, the main pathway ascends and from it in the course of a few yards another path leads into the San Romolo Valley; the path now becomes very rocky and rough and in a quarter of an hour or twenty minutes a hill is reached from the back of which there is a grand view of Bignone and of the other mountains of the San Remo amphitheatre, rendered more striking and imposing by the dark shadows of evening now gathering upon them. The wide valley of San Romolo is seen to great advantage for nearly its whole length, with San Remo occupying a conspicuous position at its termination. The further you proceed on the mule-path the wilder and grander the scenery becomes, and by it San Romolo may be reached on the right, or Colla on the left. Above the Olive trees the summits of the hills and spurs of the mountains are more or less bare and it is then seen that some of them are of the schistous formation, the strata in many cases being placed almost vertically.

Chapel of San Lorenzo.—Take the mule-path on the eastern side of the Hôtel des Anglais. The ascent is steep at first; in a few minutes you observe on the left a small Chapel and Monastery in ruins, Il Monastero Sappia,

named after its founder who was buried in the vault at the foot of the steps leading to the Chapel; just past this two paths are seen on the left going down into the valley of Bernardo and then another to the right which descends the Foce Valley. Keep straight on; in about a quarter of an hour a shrine is reached on the left and a mule-path branches off down the Foce Valley bearing in the direction of Colla. Do not take this however, but go on, and in a few minutes more Colla is seen, apparently but a very little way off; almost immediately is a second shrine on the right, soon after passing which a tolerably good path is observed running down the Foce Valley and from that point there is a good view across the valley and of the Church of San Bartolomeo on the other side. The mule-path now bears somewhat to the left in the direction of Colla, and skirts the Bernardo Valley; in less than five minutes a good path branches off still more to the left, the original mule-path, which should still be followed, now ascends a little to the right; after a few yards a good path leads gently down the western branch of the Foce Valley, this has received the name of the Mossè Valley, it being separated from the other branch of the Foce Valley by an intervening hill or spur. In a few minutes the very pretty and beautifully situated little Chapel of San Lorenzo is reached, the ascent to which on foot occupies about three quarters of an hour from the Genoa road; there is a still better view from here of the Chapel of San Bartolomeo and also of the Bernardo Valley and Colla. Just past the Chapel there is another path leading down the Mossè Valley, and a few yards further a shrine on the left with a well executed painting; just beyond this another very good path branches off on the left, going down the Bernardo Valley; the mule-path, which now ascends sharply bearing to the left, passes over masses of rock almost too rough even for a mule. After an ascent from this point of about a quarter of an hour a rocky plateau is reached at the foot of a conical mountain, and from this there is a glorious view both right and left, embracing the whole of the San Remo amphitheatre.

This view is well described by Mr. Aspinall. 'As almost all the hills and valleys lying round San Remo are seen from this point, it will be a good place to specify their names. You are standing with your back to Piano del Carparo, on one of its spurs,—the one which divides the valley of the Bernardo on the right, from that of the Mossè, on the left; the next spur divides the Mossè from the Foce; it is short and at its foot the two valleys join into one. Piano del Carparo leads up to Monte Caggio, Monte Caggio to Monte Bignone. The deep valley which runs from Bignone to the sea is the valley of San Romolo; the hill bordering it, on its further side, is Campo Bandito: this hill divides the valleys of San Romolo and Francia. Then comes Il Poggietto, separating the Valle di Francia from that of Bestagna; the next ridge is Monte Colma, enclosing the further side of the Martino Valley; one of the three valleys which run the whole way from the sea up to Bignone. (San Romolo and Ceriana are the other two.) The peaks rising beyond this again, are those of Monte Lona, lying at the head of the Taggia Valley; Monte Panizzi, Monte della Croce, and Monte Calvo; they slope down to the sea, which sweeps round from here back to Monte Corvi and the furthest spur of Piano del Carparo, behind which the pyramidal head of Monte Nero raises itself, completing the panorama.

'The towns are San Remo, of which you only see the highest part, Bussana on Monte Panizzi, Torsorio far away on a spur of Monte della Croce, and Colla on the furthest spur of Piano del Carparo.

'The Chapels are San Bartolomeo, San Romolo, San Giacomo, Villetta, and the Madonna della Guardia, to the left; while to the right, are the Madonna di Bonmoschetto, and a little higher up, San Bernardo.'

The above description, excellent and accurate as it is, applies obviously to the view as seen from a point much below that which I reached, and from which were visible on the left the white tower on the ridge of Poggietto, the Croce di Parà, and what appeared to be the square tower

of Poggio, and on the right Colla lying far below with the road leading to Ospedaletti, Capo Nero and the mountain range beyond. The view here was truly grand, and I left it with great reluctance. The smell of Wild Thyme filled the air, the loud humming of bees was heard, and once more our old but vigorous friend the 'Red Admiral' made his appearance, as well as the ever active Humming Bird Moth. The mule-path seemed still to go on and on, ever ascending, making apparently for the summit of the higher mountains, which, had time and strength permitted, I too would have gladly scaled.

Descent of the Mossè and Foce Valleys.—Descend the hill by the same path, to where the branch is given off which leads down into the Mossè valley and which should now be followed. In a few minutes the stream is reached; pass over this and ascend the opposite bank, crossing the spur which separates the Mossè from the continuation of the Foce Valley, and descend to the Foce stream or torrent, which you cross by a high single arched bridge. Ascend on the other side and follow the mule-path which goes down the valley and from which many pleasant peeps are obtained across the valley and down to the sea.

In about half an hour after crossing the Foce torrent the mule-path divides, the branch on the right traversing the ridge which separates the Foce and San Romolo Valleys and leading up to San Bartolomeo, while the continuation of the mule-path passes by the ruined house on the right, which was noticed particularly in the excursion to San Bartolomeo, and from this it runs on to the Costiglioli quarter of the town situated on the left or western bank of the San Romolo Valley. Descending through this quarter the Genoa road is gained just opposite the Villas Carli. The walk through the Mossè and Foce Valleys is a very charming one; wild flowers in abundance are met with, including the scarlet Tulip, T. Præcox; the mauve Anemone, A. stellata; the Oriental Hyacinth, and countless Violets. The terraces here, as in most of the other valleys,

are thickly covered with the bright green, self-sown Oat, which is now being cut down in large quantities and used as fodder for cattle.

When we see the vast profusion in which wild flowers grow in some of the valleys, but little apprehension need be felt of their extinction by gathering them for sale; it seems that they suffer to a much larger extent by the digging up and planting of the terraces, when enormous quantities of bulbs and roots are frequently removed and destroyed. The excursion as far as San Lorenzo is a tolerably easy one, but it should be made by invalids on a donkey; the descent by the Mossè and Foce Valleys is also by no means difficult.

Walk in the Foce Valley.—Leave the Genoa road by the turning which runs between the new West End Hotel and its Dependance; follow the pathway at the back of Villa Congreve which gradually ascends until it passes the Villa Evelina, distinguished by its statues, close to which it joins a mule-path running right and left. Turning to the right the path, after passing a number of villas, brings you in the course of a quarter of an hour to the Via Costiglioli by which the old town is entered; but following it on the left, it terminates in about twenty minutes in the Foce stream, which here can be crossed by stepping-stones unless the stream be swollen by heavy rains. Just before the path descends to the stream another path is given off from it, this after ascending the valley for a short distance, also goes down to the stream, which in this situation can be crossed even more easily; there is a pathway on the other side by which the mule-path from San Lorenzo may be reached in a few minutes. This walk in the Foce Valley is very easy and really beautiful, the Olive trees are fine, some of them very ancient and curious, and Lemon trees interspersed with a few Orange trees abound; the stream itself is also picturesque. A number of small pathways are seen running in different directions, some higher up the valley, and which if followed would no doubt bring the pedestrian to many a pleasant nook. This is the most suitable walk amongst

the Olive trees for invalids residing on the west side of the town.

THE BERNARDO VALLEY.

Chapel of San Bernardo. Madonna di Bonmoschetto. Colla.

This is the last of the three valleys on the west side of the town, it is very open, its western boundary being formed by the ridge which terminates in Capo Nero; high up on this stands the town of Colla, which may be reached by two routes; the steepest but most direct way is by the mule path seen immediately after passing the Villa Luigia Ponente, the other by the mule-path which starting from the eastern side of the Hôtel des Anglais passes the Monastero Sappia and runs along the ridge which separates the Bernardo and Foce Valleys; at the first shrine which is passed on this ridge, a path is given off which descends into the Bernardo Valley and runs in the direction of Colla and it is this which should be followed if this second route be selected. Usually however the ascent is made by the steeper and more direct way and the return by the ridge above referred to as separating the two valleys.

On the last occasion when I made an excursion in the Bernardo Valley, as the object was to see as much of the valley as possible, the pathway was taken which branches off from the ridge soon after passing the second shrine. Following this, after a steep ascent, the road bore to the left and, on turning round, a fine view was obtained from this point across the valley, of Capo Verde, of the Madonna della Guardia and of the bay of San Remo. The path then turned to the right and higher up Bussana came into view, but as the pathway continued to ascend apparently leading up into the mountains, and as Colla lay now some hundred feet below and behind us, the mule-path was abandoned and the head of the valley was crossed by small branch paths not available for mules, and in a

short time the broad mule-path behind and above Colla was reached.

This path, which was very steep and rough, was ascended for some distance, in fact until it divided into two, one division leading to the right and apparently running across the head of the Bernardo Valley, and the other on the left, traversing a mountain ridge running in the direction of Ospedaletti. From this point, as also lower down and near to Colla itself, the views are very extensive. On the right, Cap Ampeglio crowned by the old town of Bordighera, and the bay and amphitheatre of Ospedaletti are seen and some hundred feet below, Colla, Capo Nero, the *Chapel of San Bernardo* and on the left the valley of Bernardo, San Remo, Capo Verde, and the mountains forming the eastern boundary of the San Remo amphitheatre with Bignone to the north. The descent was now made to Colla, which will be separately noticed.

In order to vary the route and explore the Bernardo Valley still further, the descent was made by a very rough and small pathway immediately to the east of Colla. This path was soon lost and the descent of the valley was effected by various other foot-paths, and a mule-path was at length reached which after a short time passed the chapel of the *Madonna di Bonmoschetto* and in a few minutes terminated in the Genoa road some little distance to the west of the mule-path near the Villa Luigia Ponente by which the ascent to Colla is usually made.

In different parts of this valley wild flowers abound, including the blue variety of Anemone coronaria L., and the scarlet and mauve varieties of Anemone hortensis; also the very pretty blue Nectaroscilla hyacinthoides Parl., with its delicate almond-like odour.

The usual way of reaching *Colla*, which is 1000 feet above the sea, is, as already pointed out, to take the mule-path just after passing the Villa Luigia Ponente. The ascent by this path is particularly steep and the path itself full of rocks, boulders, pits, and holes, and is in fact as rough and rugged as it well could be. After ascending for a little time the view becomes very pretty. On the

right you look down into the Foce Valley, while to the left there are charming peeps of the sea. As you near Colla the valley of Bernardo opens out, and, looking towards the east, a really fine view of the surrounding amphitheatre of Olive-clad hills and Pine-covered mountains is obtained. Entering the town, which is situated on one of the spurs of Piano del Carparo, and which is reached from San Remo after about an hour and a half's climbing, it is found that Colla is composed of an aggregation of closely built houses, without order or beauty, and, like most small Italian towns similarly situated, remarkable for the narrowness of its streets, their dimness, the number of arches thrown across them, and the steepness of the staircases.

Colla, however, strange to say, possesses a collection of paintings bequeathed to the town by Professor Rambaldi, a native of Colla, and this is well worth a visit; it includes some original pictures by Nicholas Poussin, Gaspard Poussin, Paul Veronese, Salvator Rosa, Domenichino and Carlo Dolce. There is also a library of over 6000 volumes, a gift to the town from the same benefactor. Visitors should not omit to see the Sacristy of the parish church, where is the large and beautifully carved ivory crucifix, the legacy of Monsignor Stefano Rossi, also a native of Colla, or Colle di Rodi as it is sometimes called.

The town is a very much larger place than would at first sight be supposed, and although in its present condition it is unattractive, it yet might with a little outlay be greatly improved. It occupies a commanding situation; the prospects around are extensive and beautiful, and facilities exist for the making of one or two terraces and promenades which would be of the greatest possible benefit to the inhabitants and which would serve to attract visitors to the town. One great improvement is already in course of construction, and will it is hoped be completed in a few months, and that is a carriage-way; this commences in the Genoa road at a short distance beyond Capo Nero, and terminates at Colla, which will

thus become readily accessible, and the views from it will doubtless prove as attractive as those from Poggio and the Madonna della Guardia.

At a short distance from Colla, on the ridge which terminates in Capo Nero, is the Chapel of San Bernardo, and behind this runs a mule-path leading down to Ospedaletti. From this chapel one of the best and most favourable views of Colla, with its encircling mountains is obtained.

The mule-path which leaves the town on the north and ascends the side of the mountain presents a very inviting appearance to a strong and adventurous climber; this is the path by which Colla was entered on the way back from the excursion up the Bernardo Valley. Steep and trying as the ascent to Colla is, the descent by the same path would be even more fatiguing, it is well therefore to return by another road. At the corner of the principal church is a fountain from which the inhabitants derive their supply of water, and the overflow of which escapes as a small stream down a pathway or mule-track to the right of the church. Follow this, it leads across the head of the Bernardo Valley for about ten minutes, when you come to a small stream over which you cross by an arch; continue on the same track for about five minutes more, when you cross another stream with a water-tank for irrigating purposes close to the path. This now turns to the right and after a time skirts for some distance the eastern side of the Bernardo Valley; after about twenty minutes the rough mule-path which we have hitherto followed makes a sharp and very steep ascent to the left; this leads up to the Chapel of San Lorenzo, which however is not visible from the path. Be careful not to ascend this, if it be desired to return direct to San Remo, but follow the path on the right, which, narrow at first, afterwards becomes a regular mule-track and which evidently leads downwards. After a time the western side of the Foce Valley is reached, along which you continue, passing on the way the ruined Chapel of the Monastero Sappia, until you arrive at the Genoa road close to the Hôtel des Anglais.

Very noticeable features in the Foce Valley as seen on the return journey are the small houses and buildings scattered about in different directions, each of these being distinguished by one or more of those stately Pyramidal Cypresses, which are so conspicuous in the scenery of the Riviera, and which seem to stand about buildings like landmarks to point out the way to the traveller.

We started for Colla at two o'clock in the afternoon and on the way back it became dark before reaching San Remo. On nearing home and looking across the Foce Valley, I observed on the edge of the ridge separating it from the San Romolo Valley, a limited red glow like that which precedes the rising of the sun or the reflected light which is sometimes seen in the east on its setting. I thought it might be the glare of a mountain fire; but in a few minutes the cause became apparent, the full moon rose slowly and grandly behind the hill, unobscured by a cloud and shedding around it such a flood of light as to illuminate the surrounding hills and mountains and to bring their outlines clearly into view, a panorama of exceeding loveliness being disclosed.

CHAPTER VII.

OSPEDALETTI. BORDIGHERA—Description—Climate—Palm Groves. VENTIMIGLIA—Description—The Roya—Climate—Not a Health Resort—Fortress—Conglomerate. MENTONE—Situation—Encircling Hills and Mountains—Carei Valley—Boirigo Valley—Gorbio Valley—Eastern Bay—Western Bay—The Old Town—Mentone Valley—St. Jacques Valley—Walks and Drives—Meteorology—Climate. MONACO—Climate. MONTE CARLO—Village—Climate. EZE—Climate. BEAULIEU—Climate. VILLEFRANCHE—as a Health Resort. NICE—Vegetation—Surrounding Mountains—Climate—Opinions of Medical Writers. CARABAÇEL—Suburb of Nice. CIMIEZ—Climate. CANNES—Description—Vegetation—Drainage—Town Refuse—Water Supply—Mistral—Meteorology—Climate.

THE several health resorts and towns of the Western Riviera lying on either side of San Remo may now be described; and first those westward of that place, including Cannes.

OSPEDALETTI.

On reaching Capo Nero from San Remo by the high road, the village of Ospedaletti becomes visible. This is situated near the centre of a small bay, bounded on the east by Capo Nero, and terminating on the west at a point at a considerable distance from Capo Sant' Ampeglio, a promontory which runs well out into the sea and on which part of the old town of Bordighera is built.

The bay of Ospedaletti, after the manner of very many of the bays on this coast, is encircled by Olive-clad hills and mountains.

On the eastern side the hills rise somewhat abruptly near the sea, there being also but little space between them and the sea on the western side; the promontories on either side of the bay gradually increase in height as they

approach the north, where they attain elevations so considerable as to become mountains. The village itself lies close to the sea-shore, while immediately behind it is a hill with a small ravine and torrent on each side.

The distance between the promontories does not much exceed two miles, and the entire area enclosed is very small; the principal sites available for building are on the western side of the bay, but there is also room for a few villas on the eastern side. Owing to the position of the central hill and the ravines, there are scarcely any desirable situations for houses immediately behind the old village.

It is obvious therefore from the above description that the bay and shore of Ospedaletti is on the whole well protected, although less so on the north than on the north-west and north-east. From the smallness of the area enclosed and the fact of the mountains rising close to the sea, there is not enough space to allow of a town of any size being erected.

Dr. Walshe some years since predicted a great future for Ospedaletti as a health resort, to this date however it has shown no signs of fulfilling the destiny prophesied for it. At present it consists only of a very small, and, notwithstanding its picturesque surroundings, dirty village, formed of a single street and a church. There are no villas or apartments, not a single hotel and no houses of entertainment, beyond two little wine-shops, where they profess to sell 'buono vino.' It is said that 'good wine needs no bush,' but in France and Germany, especially on the Rhine, I have observed that it is a very common thing indeed to hang a bush, usually the branch of a fir, over the doorway of wine shops; surely those who adopt this practice must be ignorant of the adage just quoted. One of the wine-sellers at Ospedaletti, not satisfied with exhibiting the usual branch, has placed a whole fir-tree laden with cones at his doorway.

The hills round Ospedaletti are thickly covered with fine Olive trees: immediately behind the village are a few Lemon trees laden with fruit, as well as some Palms tied up in the same manner as they are at Bordighera.

Unfortunately here, as in so many other towns on the Riviera, the railway runs close to the sea, cutting the inhabitants off from access to the shore except through sundry dirty archways. This deprivation is greater in the case of Ospedaletti than in some other places, for the beach here is fairly good, consisting partly of sand.

BORDIGHERA.

The next place after leaving Ospedaletti is Bordighera. The accounts I have met with of this little town are very incomplete and not at all commensurate with its character. Bordighera contains about 2000 inhabitants, is five miles from San Remo and ten from Mentone. It may be divided into an old and new town; the former stands at a considerable height and is partly built on the promontory of Sant' Ampeglio; the new town lies below the old and extends in a straggling manner chiefly westward on either side of the Genoa road, which here and as far as Ventimiglia is nearly level.

To the north, Bordighera is protected by a range of hills of no very great elevation; in this, to the west of the town, there are at least three gaps formed by valleys through which streams issue discharging themselves into the sea; there is also a valley and stream on the east side. The three valleys westward are the Borghetto, with near its commencement the villages of Borghetto and Vallebuona; the Crosia, separated from the Borghetto Valley by a ridge or hill, Cima di Monte, from which there is a remarkably fine view; up this valley in succession lie the towns of Vallecrosia, San Biaggio, Soldano, and Perinaldo, while from the ridge which separates the Crosia from the third valley, the Nervia, at a still higher elevation, there is also an extensive prospect. The river which runs through the Nervia Valley is in winter of considerable size and flows in a bed of large dimensions; at the end of this valley, a portion of a range of mountains is visible, apparently at no great distance, and which I have always seen covered with snow. The excursions up these valleys

and upon their dividing ridges are particularly pleasant; they are mostly clothed with Olive trees, some of which are said to be several hundred years old, and they abound in wild flowers.

The excursion up the valley of the Nervia to Pigna is a very pleasant and favourite one, and there is a good carriage-road all the way. Campo Rosso is first passed, then the curious village of Dolceacqua, crowned by the ruins of the ancient château of the Dorias, which has stood the brunt of more than one siege, and, lastly, Pigna, which is beautifully situated and where are some copious Sulphur Springs which have a great local reputation, but of which no general use has yet been made owing to the want of suitable accommodation.

The valley to the east of the town is the Sasso Valley, and on the ridge which separates it from the Borghetto Valley, the villages of Sasso and Seborga are situated. Although the hills to the north of Bordighera are of no great elevation, the mountains to the west are lofty and present a varied and picturesque outline, the summits of some of those forming the Mentonean amphitheatre, including the Berceau, being plainly visible.

It appears therefore from the preceding description that the old town, from the fact of its being built on a promontory, is somewhat exposed, and of Bordighera generally it may be said that it is only imperfectly protected from the northerly winds, but is somewhat more sheltered from the east and west winds.

The space lying between the hills to the north and the sea is of considerable size, perfectly flat and almost on a level with the sea; the soil, for the most part sandy and alluvial, constitutes in fact a delta, formed by the streams above referred to, the Nervia and the Roya at Ventimiglia.

The old town may be approached both from the east and west by carriage-drives which branch off from the Genoa road; it may likewise be reached by a broad and steep footway which also has its commencement in the same road.

The view from the extremity of Capo Sant' Ampeglio is very extensive and beautiful, embracing to the east the great Palm groves of Bordighera, the smooth beach with numerous fishing boats, Ospedaletti, Capo Nero, and lastly Capo Verde crowned by the chapel of the Madonna della Guardia; while on the west a splendid panorama of mountains comes into view, including those of Mentone, the coast line as far as Cap Martin, Cap d'Antibes, and sometimes even the Esterels. The surroundings therefore of Bordighera, especially as seen from the old town, are very striking and picturesque. Standing on a promontory, Bordighera is itself a very conspicuous object and is plainly visible from most of the towns on its western side.

Like the other old towns of the Riviera, it presents some features of interest to the antiquary, and it appears to have been at one time entirely enclosed by a high castellated wall; it is very clean, free from bad smells, and presents altogether a superior aspect, which is heightened by the recent erection, just outside the walls of the town, of a few modern houses, built no doubt in consequence of the views thence obtained. The new town extending along the Genoa road consists of a street of shops, three hotels, two or three pensions, and a few villas; there is also an English church.

From what has been stated, especially as regards the incompleteness of the shelter on the north, it might be expected that Bordighera would be a very much colder place than its neighbours on either side, Mentone and San Remo, and it no doubt is colder, but when we come to examine the character of the surrounding vegetation, the evidences of this are by no means so striking as might have been anticipated. The meteorological observations relative to Bordighera are neither numerous nor altogether satisfactory; they will be found referred to at page 71.

Approaching Bordighera from Ventimiglia it is seen that the hills to the north are but sparsely covered with Olive and rather diminutive Fir trees, but that the former become more abundant on the western side and below the old town. In the course of the streams are many beds of

Bamboo, and on the level space between the hills and the sea are some Golden Willows and numerous groves of Lemon trees, all of which, however, are sheltered to some extent by walls or screens made of the bamboo or leaves of palms. These fences are in fact to be seen everywhere, and since they are withered and yellow, they present a very unattractive appearance. Notwithstanding the severity of the winter of 1878–9, the Lemon tree and even its fruit escaped without injury. The vine is extensively cultivated here, as well as large quantities of vegetables, including peas, which are in flower and pod nearly all through the winter. A few small umbrella Pines are to be seen as well as Aloes, one or more of which are usually in blossom.

I have still to refer to that which in fact gives to Bordighera its reputation and which constitutes its chief attraction and glory; namely, the Palm trees. These abound everywhere, and are of all sizes and ages; the principal Palm groves lie to the east of Capo Sant' Ampeglio, which shelters them somewhat from the westerly winds. The Palms in these groves are very fine, some of them attaining a height of a hundred feet or even more, and being, it is stated, over a thousand years old. The effect produced is very striking, the Palms imparting to the scene an Oriental character which would be even more apparent were it not that the leaves of very many of them are gathered up and tightly bound together, whereby of course the trees are deprived of all their feathery gracefulness. The object of this proceeding is to prevent the leaves from becoming green, they being preferred colourless for some purposes, although they are used in church processions and decorations both green and blanched. Another very fine and ancient grove is on the left-hand side of the footway already referred to, leading up to the old town.

Now, it is generally imagined by most people that the presence of ancient Palms in great numbers in any locality affords indisputable evidence of the exceptional mildness of the climate: this is true to a certain extent only, since

this, the Date-bearing Palm, would grow nearly if not quite as well in most parts of the Riviera, and particularly in such sheltered places as San Remo and Mentone; but they are not planted there to any great extent, because their cultivation would not pay, as there is but little demand for the leaves, whereas Bordighera has long had the monopoly of the supply of palms to the churches of Rome on Palm Sunday.

One of the attractions of Bordighera is the fishing; Mentone and San Remo are both partly supplied with fish from this place, from which it may be inferred that both rocks and shallow water are to be found near the shore.

To sum up then, it may be said of Bordighera that its winter climate is somewhat colder than that of the towns on either side of it and that it is less dry, especially the western part; indeed after any continuance of rain, one would be led to regard it as damp, at least for a time; hence the climate is comparatively sedative, and probably better adapted to cases attended with much nervous excitement than some of the other towns of the Riviera; one great advantage is the large extent of level ground available for walking exercise.

Bordighera has been much improved during the last few years, and some new roads are now being made which will add still further to its development. Invalids should not settle there for the winter unless they have friends with them, and also some resources in themselves, as they will be apt to find it extremely dull.

VENTIMIGLIA.

The country between the valley of the Nervia and that of the Roya does not possess any striking or special features of interest; the road lies at some distance from the sea-shore, and the intervening land is flat and almost on a level with the sea, it constituting in fact a kind of delta similar to that at the mouth of the Nervia. Arriving at Ventimiglia from Bordighera by the railway, one notices first, around the station a number of very fine Castor-oil

plants, so large in fact as almost to be trees, and these when in full leaf and blossom present a very handsome and striking appearance with their large leaves, reddish stems, and prickly seed-vessels; and second, some Eucalyptus trees which having been recently planted have not attained a great size, but which are yet in a flourishing condition. Emerging from the station, on the right, the hills are seen which form the western bank of the Roya Valley, and above them some of the higher mountains of the Mentonean amphitheatre, which were partially covered with snow on the occasion of my visit on the 13th day of January. A descent of a few yards brings you to the long straight street which forms the more modern portion of the town, and which terminates westward in the bridge which crosses the Roya; standing on this bridge and facing northwards a fine view is obtained up the wide and open valley, crowned at the end by a picturesque range of snowy mountains, the Col di Tende, the same range which greets the eye on looking up the valley of the Nervia, but which is here seen on a larger scale. Looking into the broad and stony bed, it is seen that the river is split up into several considerable streams, on the banks of each of which numberless washerwomen in all directions are usually busily engaged in the work of cleansing, which, owing to the abundance of the water at their command, can here be much more satisfactorily performed than in most other Italian towns; in fact, the Roya at this point forms the chief washing and, it may be added, drying-ground for Ventimiglia, a town numbering some 7000 inhabitants. Having crossed the bridge, immediately in front, perched high on the western bank of the Roya, the old town of Ventimiglia is seen, and still higher up, overlooking the sea, is the fortress, which guards the road leading from France into Italy. Do not enter the town at once, but turn for a hundred yards or so to the left, when on the right-hand side a broad, paved pathway with occasional steps will be seen; ascend by this, it leads first through a sunless street, at the end of which on the left-hand side stands the very pretty Cathedral, behind and

joined to which is the Baptistery. On the sea side of the Cathedral is the Ospedale Civico, and behind the Baptistery, but close to it, is a church, near to which is a small terrace, high above the sea, which commands a really lovely prospect. Drawn up on the beach below are a number of boats and small vessels; towards the east lies the low Olive-covered plain of Ventimiglia and further on a long coast-line with Bordighera standing out prominently, while on the west, part of Mentone with its mountains is seen and the coast in clear weather as far as even the Esterel mountains; at this elevation the view of the valley of the Roya, and especially of the range of snowy mountains, is truly grand. Beside the Civil Hospital there is a pleasant sunny promenade with seats, and opposite the Cathedral is the commencement of a broad street with shops on either side; at the end of this is another promenade planted with Plane trees and provided with many benches, and from here also there are fine views. These terraces and promenades are the favourite resorts of the inhabitants, and very pleasant and healthful they are.

From the description given of the broad valley of the Roya, with far up it the lofty range of snowy mountains, apparently but a few miles distant, the reader will be fully prepared to hear that Ventimiglia is both cold and windy as compared with many other stations on the Riviera, and further that the delta formed by the Roya is at times very damp and even malarious. Ventimiglia, therefore, is not a health resort, nor is there any prospect of its becoming so in the future.

Just below the promenade last above-mentioned, runs the high road, skirting a very pretty bay about four miles across, which terminates at Pointe de la Murtola, the eastern boundary of the bay of Mentone. Following this road for a short distance it is seen that there are really two fortresses, one high up on the summit of the hill to the right, and the other close to the road on the left; just beyond this, on the right, is a lofty cutting, which, in some places, must be at least a hundred feet high, this extends for a considerable distance and consists entirely of

conglomerate which has evidently been deposited in layers and which at the further extremity is seen to rest on what appears to be a layer of dry clay. On the face of this cutting grow large quantities of Maiden Hair Fern, the fronds of which however are not very large or luxuriant, owing to the inadequate supply of moisture. A little further, on the same side of the way, another geological feature of interest presents itself, and that is a fine bed of schistous formation, the layers of which are disposed almost vertically. As the pedestrian proceeds along this road, the vegetation becomes more interesting and luxuriant; many bushes of Myrtle, of Rosemary in blossom—about which a few butterflies even at this time of the year were hovering, chiefly the Red Admiral, Pyrameis Atlanta, and the Clouded Yellow, Colias edusa—of Juniper and of Fir are seen, as well as a number of other vegetable productions and plants; which are only waiting for the greater warmth of the longer days to burst into renewed life and beauty. In front of a pretty house ornamented with many statues, some large specimens of the Prickly Pear were noticed; the stem of one of these had snapped off near the root, owing apparently to the very great weight of its thick and fleshy leaves, a not unfrequent occurrence; the trunk must have been at least two feet in circumference.

About the centre of the bay there is a break in the mountain range, a stream of some size, La Bevera, flowing through the opening or valley; at the mouth of this stream, as of so many others, a level space or delta has been formed; on this some houses have been built, forming the little hamlet of Latte, and this delta as well as the neighbouring heights are thickly covered with very fine Lemon trees in full fruit, the situation evidently suiting them admirably. There were also some Japanese Medlar trees in full blossom, scenting the air with their soft and delicate perfume. The Olive trees, as Mentone is approached increase in number and beauty, and an excellent view is obtained of the eastern side of the lofty range of its protecting mountains. Looking back for a moment

some distance before rounding Pointe de la Murtola, a fine prospect lies stretched out before us. The fortress of Ventimiglia and the long line of sea-coast with Bordighera standing out boldly and clearly on its promontory. Turning now the point, a beautiful view is obtained, in the words of Dr. Bennet, of 'little smiling Mentone,' as well as of the coast-line as far even as the Esterel mountains; but to Mentone itself the reader shall next be introduced.

MENTONE.

Before the days of the railway Mentone could only be reached from Nice, from which it is distant about 19 miles, by the Cornice road, the most beautiful part of which lies between these two towns, it commanding some of the finest views in Europe. From Nice the road ascends in a tortuous manner to an elevation of over 2000 feet, before arriving at the village of Turbia. The ascent occupies about two hours, and on looking back, an extensive view is obtained, not only of Nice and its surrounding mountains with the valley of the Paillon, but of the coast as far as the Esterels. Looking forward, the prospect is equally lovely; on the right lie Monaco, Monte Carlo, and the blue Mediterranean; on the left rises the steep Mont Agel, while, descending the road, Roccabruna comes into view, and turning a corner, the picturesque mountain amphitheatre of Mentone is beheld, a descent of about an hour and a half bringing the traveller into the town. Although Mentone is of course now reached much more quickly and easily by the railway, I would strongly recommend those to whom time and a little additional cost are not objects, to abandon the train at Nice and to drive thence to Mentone, the magnificent prospects above so briefly referred to, being almost entirely lost in the journey by railway. The route by train, however, is exceedingly interesting and beautiful, there being lovely views of both sea and mountain; while the Mentone station is itself situated in the midst of the mountain range which forms the Mentonean amphitheatre.

Mentone lies to the south-east, and is situated in lat. 43° 45′ near the centre of a bay about 4 miles across, bounded on the east by Pointe de la Murtola and on the west by Cap Martin, which reaches an elevation of 223 feet. It is surrounded by a series of Olive-clad hills, varying in height, it is said, to over 1000 feet, these rest against mountains which attain in the Berceau almost their greatest elevation; they are for the most part bare, and are remarkable for the beauty of their varied and irregular outlines. Chevalier Ardoino, in his work entitled 'Flore des Alpes Maritimes,' after describing the mountain ranges which enclose, as in the segment of a circle, the several territories of Menton, Castellar, St. Agnes, Gorbio, Roquebrune, and Monaco, as also part of those of Ventimiglia, Castiglione, and Turbia, writes: 'The space thus enclosed is the soil of our Flora. I can confidently affirm that there is nowhere else on the shores of Europe so small a locality surrounded by mountains of an equal altitude. The gigantic and continuous screen which exists to the north of Menton, consists of a series of peaks the main height of which exceeds 1200 mètres = 3937 feet, and these peaks are connected by passes, the lowest of which yet reach an elevation of 900 m. = 2952 feet, the only exception being the Col de Castiglione which is but 720 mètres' = 2362 feet.

Behind this semicircle of mountains but invisible from the town, is the main chain of the Maritime Alps, rising to a height of from 5000 to 9000 feet, and which still further help to shelter it from the northerly winds.

The hills and mountains immediately encircling the Mentonean area increase in height to near the centre, where are Mont St. Agnes, the Roc d'Ormea attaining a height of 3650 feet, and the Berceau, which lies more to the east, with an altitude of nearly 3850 feet; this range is partially penetrated by the Carei, the Boirigo, sometimes called the Cabroles, and the Gorbio Valleys, up which there are carriage-roads and all of which terminate in the western bay of Mentone.

The Carei Valley passes close to the railway station;

the stream which runs through it in a wide stony bed being crossed by bridges. The left, or west bank of this valley is traversed for some miles by a broad carriage-road bordered for some distance by an avenue of Plane trees; this gradually ascends, passes through a tunnel, and, descending, joins at Sospello the road from Nice to Turin by the Col di Tende. The scenery up this valley, as also that of the smaller valleys which diverge from it, is very interesting.

Near the entrance of the valley and for some way up it, villas have been erected on both sides; ascending it for some distance the Chapel of Monti is seen in a conspicuous position, forming a very pretty object in the view. In the lower part of the valley Lemon trees abound, then follow Orange, Lemon, and Olive trees more or less intermingled, and higher up, where the valley becomes narrower, these are succeeded by Fir trees, the bare mountain peaks towering above them to a great elevation.

The Boirigo lies to the west of the Carei Valley; a considerable torrent runs through its stony bed, and near its entrance several villas have been built; on either side of it is a carriage-road, that on the right bank being continued for some distance beyond the point where the valley divides into the Cabroles and Châtaigniers Valleys, the latter corresponding to what is also sometimes called the Primrose Valley. The view of the bare and picturesque peaks of the St. Agnes mountain, crowned by the ruins of a castle built by the Saracens, as seen up the Boirigo Valley is very fine, and the two small valleys which branch off from it are very pretty and afford, it is stated, shelter from every wind. They abound in wild flowers, one being the pure white Cephalanthera ensifolia Rich. At the end of the Cabroles Valley is the village of the same name.

The Gorbio Valley is now traversed by an excellent carriage-road at the end of which there is a bridle-path leading up to the town of Gorbio, from which there is a pathway to Roccabruna. The scenery is very pleasing, and the valley full of fine Lemon and Olive trees.

The centre or widest part of the space enclosed by the

mountains surrounding Mentone is said to be as much as two miles from the shore, and this space as well as the bay is subdivided into an east and west portion and bay by the spur of one of the higher mountains, on which the old town of Mentone is situated.

The eastern portion of the town extends from the Pointe St. Louis, near which is the small port of Mentone, to Pointe de la Murtola; the space included is rather shallow, the mountains rising up abruptly to a considerable height at a comparatively short distance from the shore, and, there being no break in them, the protection afforded is complete. There is an extended frontage to the sea along which is a carriage-drive and esplanade almost on a level with the shore. This frontage, as well as the elevated space between it and the mountains, is now well covered with hotels, pensions, and villas.

The western portion may be described as consisting of two parts. The avenue of Plane trees, Avenue de la Gare, leading from the railway station, joins the high road at right angles, the trees being continued along this right and left for a considerable distance. On the right or west are many of the hotels and villas forming this portion of the town, the continuation of the road leading to Cap Martin and Monaco, and the upper, or Cornice road, to Roccabruna. On the left the Carei Valley is crossed by a bridge, and the straight, modern street, Avenue Victor Emmanuel, is entered, which terminates in the Rue St. Michel, chiefly occupied by shops, and which forms the lower street of the old town; from this several narrow streets ascend the hill to the old town. On either side of the Avenue V. Emmanuel are some hotels and villas, but many buildings have also been erected to the south of this street facing the sea, where too there is a handsome esplanade, the Promenade du Midi, well provided with seats, this being in fact the pleasantest and most frequented of the three esplanades which Mentone happily possesses.

On one side of the Rue St. Michel is a small but well-stocked market. High up the hill on which the old town

is placed is the ancient church of St. Michel and on the summit of the hill at a very great elevation from the sea and right above the town is, singular to say, the very curious Cemetery; a portion of this is allotted to the Protestant community, and contains many very handsome monuments chiefly in marble, and it abounds in Roses and other suitable flowers which grow in such luxuriance in the favoured climate of the Riviera. From this Cemetery there is a lovely and extensive prospect, on the one side of the eastern bay of Mentone, of Ventimiglia, and the coast-line as far as Bordighera; on the other of the western bay, the Tête de Chien at Monaco and the coast-line on a clear day as far as the Esterel mountains: behind, the mountains forming the Mentonean amphitheatre are seen in all their beauty; while on the west of the hill is the Mentone Valley enclosed between high shelving rocks through which flows a stream which gives fertility to the valley and to which the flourishing condition of the Lemon trees contained in it is mainly due. The railway runs up this valley for a short distance. East of the Cemetery is a still higher hill, upon which a new Cemetery has been partly constructed and from this there is a still more commanding prospect. A pathway runs round this hill leading up the Berceau, and following it for a short distance, we are enabled to look down into the very pretty little valley of St. Jacques in which invalids residing in the eastern bay can find both shelter and level walks. Torrents run through both the Mentone and St. Jacques Valleys, that of the former discharging itself into the sea to the west of the port. A little to the east of the St. Jacques Valley are the Ravin de Garavan and the Ravin de Pyroné.

Mentone has now become a place of considerable size and importance; it has two English churches, a casino, many first-class hotels, pensions, and over a hundred villas of various sizes. It is clean, bright, cheerful, and from the beauty and varied outline of its surrounding mountains, it is next to Nice the most picturesque of all the health resorts of the Western Riviera. It is particu-

larly fortunate in the number and variety of its drives, promenades and walks, and equally so in the circumstance that the railway runs at the back of the town and does not, as in so many other cases, skirt the coast, thus cutting off the inhabitants from the sea and preventing the construction of that essential of every sea-side health resort, a spacious promenade by the shore.

The principal drives are along the eastern bay to Ventimiglia and Bordighera, up the Carei and Boirigo valleys, westward to Cap Martin or Monaco, and by the Cornice road to Roccabruna and thence by Turbia to Nice.

In calm and suitable weather there are no more pleasant and attractive walks than those on the several promenades by the sea, and when shelter is required the more protected valleys, such as those of St. Jacques, and Gorbio may be chosen, or the Olive groves covering Cap Martin.

From the extreme point of Cap Martin a very fine view is to be obtained, embracing the bay, the town, the surrounding mountains and the coast beyond Ventimiglia in the one direction, and in the other the country and mountains as far as the promontory on which Monaco stands, with still more westward some of the Maritime Alps.

In addition to the walks and drives indicated, many mountain excursions may be made, as to the top of St. Agnes 2400 and the Berceau 3850 feet, to the Monastery of S. Annunciata, which is seen from the entrance of the Carei Valley, and to Castellaro 1200 feet, from all which points extensive and beautiful views are obtained. Lastly, there is a splendid view from the Grimaldi or Saracen tower, more than a thousand years old, in Dr. Bennet's interesting Italian garden. It will thus be seen that Mentone is particularly well off for drives and walks, although many of the latter, as is the case in all mountainous districts, are too steep for the great majority of invalids. 'It is,' Mr. Augustus Hare has written in 'A Winter at Mentone,' 'in its secluded valleys or in its deep Orange and Lemon groves along the banks of its torrents, or amid the heights of the wild mountain chain which forms its

background, that the principal charm of Menton is to be found.'

I must not forget to refer to the Red Rocks and celebrated Bone Caves near the eastern bay of Mentone thus described by Mr. Hare

'A rugged path beneath the cliff leads round the 'Roches Rouges' to a platform whence there is a splendid view of the town and of the mountains, embracing the distant coast of France, the Esterels and Antibes with Monaco, Mont Agel, Turbia, Mounts Garillon, Baudon, St. Agnes, and the Berceau. The red rocks themselves are exceedingly fine, both in form and colour, They are overgrown with Rue, Rosemary, and Euphorbia. In their caverns a great number of bones of the stag, goat, horse, wild boar, wolf, wild cat, and rabbit, have been discovered, with an immense quantity of shells of the still existing kinds of fishes. These, and the number of fragments of rude weapons in flint, also discovered here, led to the supposition that these caverns must once have been inhabited by Troglodytes described by Strabo and Pliny.'

The presence of flint instruments in these caves was first discovered in 1858 by Mons. Forel, who in 1860 published a memoir upon the contents of the caves, but in 1872 Mons. Rivière first discovered in one of them a complete skeleton and subsequently two others; these skeletons are generally believed to belong to prehistoric times. For a fuller and highly interesting description of these caves, the reader is referred to the work of Dr. Bennet, who states that, 'in order to clear up the geological history of the Mentone cave deposits, a museum has been formed in the Town Hall of Mentone, where the bones and flint utensils found in them by geologists are to be collected for investigation, along with all other specimens pertaining to the natural history of the district.'

The vegetation of Mentone is that of the most favoured portions of the Riviera; fine Olive trees clothe the surrounding hills; the Lemon tree abounds in its valleys; splendid Carouba trees are met with on the road to

Monaco, and here too the Euphorbia, which with us grows only as a small weed, attains the size of large bushes and is perennial. In the gardens, a whole host of evergreen trees, flowering shrubs and rare and delicate flowers are found, while the valleys, hills, and mountains abound in wild flowers, many of great rarity and exceeding beauty.

With respect to the Lemon tree, it should be understood that the area of its cultivation is by no means limited to that of one or two contiguous towns, but extends over a very considerable portion of the Riviera. Lemon trees occur at Nice, but they are more or less protected; at Monte Carlo, and in the course of the road leading to Mentone, as of course in Mentone itself, they flourish luxuriantly. Again they occur on the road leading to Ventimiglia; they are largely cultivated at Bordighera, though here with some slight protection, while in the Valleys of San Remo and Taggia they thrive not less luxuriantly than at Mentone, although nowhere are they seen by the traveller in such great abundance as at the latter place, in consequence of the number of trees which have been planted in and around the town, especially its eastern part, and the facilities which there exist for supplying them with water. Dr. Bennet states that in the eastern bay the Lemon trees extend 1200 feet up the mountain sides.

The exceptional warmth of the eastern bay is still further shown by the fact that the martens which inhabit the rocks near the Pointe St. Louis do not migrate, but remain at Mentone all the year through. Signor Musso, as we have seen, states that martens and swallows are to be found in some other localities along the Riviera during the winter.

The climate of Mentone may now be treated of more particularly from a medical point of view. Most writers in discussing this subject speak of Mentone as a whole, whereas it is very necessary to describe separately the characteristics of both its eastern and western bays, since these differ considerably in some important particulars. Of course the climate of Mentone resembles in a marked

degree that of the Riviera generally; that is to say, it is warm, bright, sunny, dry and stimulating.

The eastern bay however, owing to the smallness of the space enclosed and the height and completeness of its mountain protection, enjoys an exceptionally warm climate, and it is to it that the temperature and other meteorological statistics usually given and quoted by writers apply. As already stated the mean annual temperature of Mentone, that is to say of its eastern portion, according to the extended observations of M. de Brea, is 60°·9 and the mean of the six months' winter season 51°·98, being somewhat higher than that recorded of all the other health resorts of the Western Riviera. The days on which the sun shines during the year amount to 214; the partly sunshiny days to 45·7; the cloudy days to 24·8 and those on which rain falls to 80·8, of which 43·8 were for the six winter months and 37·0 for the summer months. The rainy days are thus shown to be greatly in excess of all the other stations, the number for Cannes being 70, Nice 60 to 70 and for San Remo 48 days. For further details respecting the meteorology of Mentone the reader is referred to Chapter 3.

The western bay comprises a much larger space than the eastern, the mountain shelter is further removed and of a less protective character, being pierced to some extent by the valleys of Carei and Boirigo. The former of these undoubtedly at times gives access, more or less freely to the northerly winds, while owing to the little elevation of Cap Martin the westerly wind must also affect this portion of Mentone. The late Mr. Aspinall, whose little work on San Remo has already been so often quoted, has expressed himself nearly to the same effect. 'Mentone has a south-east aspect; it is beautiful; one of the most beautiful spots on the Riviera; its mountains are very high in places with most wild and picturesque outlines, owing to their rugged, jagged peaks, but for this very reason they afford little protection, there being great gaps between, through which the wind rushes with great violence, especially down the Turin road. The western end is open to the Mistral, there being only the

low cape of San Martino to ward it off.' Thus while there is a greater circulation of air in the western bay it is also colder and more windy. It should be noticed however, that the sun shines later in this than in the eastern bay and that it affords, owing to the larger space enclosed and to this being more on the level, greater facilities for exercise. What the difference of temperature between the two bays really is, does not appear to be accurately known, b it it is commonly stated that it amounts to 3° and even 4° on the average. However this may be it is certainly very considerable, so much so as to render it unadvisable in many cases to pass from the one bay to the other, except when the weather is more than usually warm, and thus the resources of the invalid, as respects exercise, are to some extent restricted. Invalids residing in the eastern bay should not pass the limits of that bay in the cold days of winter; they should not walk on the Genoa road over the Pointe St. Louis, neither should they extend their walks into the old town or into the western bay. Those residing in the western bay will be unable to take exercise on some days when in the eastern bay it would be safe to do so, and would certainly find it necessary on many occasions to avoid altogether the Carei Valley. In passing from one bay to the other, not only will the difference of temperature between the two bays be experienced, but frequently a current of air is encountered in the narrow and sunless Rue St. Michel.

The eastern bay of Mentone, then, is well sheltered from the north, north-east and north-west winds, but is open to the east and the southerly winds. In the western bay the protection to the north and to the west is less complete. As in some other towns of the Riviera, the north-east and north-west winds occasionally round the protecting points and so find access to either bay.

Dr. Siordet, who has resided many years at Mentone, thus writes of the north-east and north-west winds:—

'The north-east wind is the coldest at Mentone. The Mistral, the dreaded north-west wind of Provence, seldom blows here from the north-west and even then is deprived

of much of its violence and coldness, but is still extremely disagreeable. It more generally comes to us from a westerly or south-westerly direction, being deflected by the mountains and greatly modified by having passed over a large expanse of water; it retains however a peculiar keenness and is rather trying to persons subject to neuralgic and rheumatic pains. The wind seldom becomes at all violent before eleven o'clock in the morning, and subsides generally at sunset; the residents are so well aware of this that they generally go out before ten, so as to secure an hour's pleasant exercise, and I have found it desirable to advise my patients to do likewise.'

Dr. Bennet states of the Mistral that 'one of the great climate advantages of Mentone is its complete protection from this wind by the Turbia mountain which separates it from Nice.'

Owing to the greater warmth of the eastern bay and the smaller space enclosed allowing of a less free circulation of air, Mentone has been complained of by some as being too warm and relaxing.

Dr. Prosser James has thus expressed himself in reference to this point:—'Beneath its eastern cliff a warmer temperature is to be obtained than at either of the other towns, but only at the cost of exercise and fresh air. It is the depressing influence of this confined air which has made some authors attribute to Mentone a sedative influence. It is however strictly as tonic a climate as any other spot along the Riviera, modified only in this one quarter by the closeness of the air.'

Dr. C. T. Williams has more recently written as follows:—'The climate is warm, very dry, and stimulating; it is also very equable, being much less liable to sudden changes of temperature than Nice or Cannes. There is a want of circulation in the atmosphere, particularly in the eastern bay; and a close proximity of most of the houses to the sea subjects patients too much to the noise and stimulating effects of that element.'

The truth really is, that each of these bays possesses both advantages and disadvantages; the one being suitable

for one class, and the other for a different class of cases. During the three colder winter months, there is no reason to complain of the closeness of the atmosphere of the eastern bay, it is only early in the autumn and in the spring, that it will be found at times too warm and close for some and consequently somewhat debilitating.

The climate of the western bay has been compared to that of San Remo, but the comparison is one which cannot, I believe, be maintained. The mean annual temperature of San Remo is 60·13, the mean three months' winter 48·89, that is to say only 0·09 less than the eastern bay, while the number of rainy days is but 45. Then again San Rémo is protected on the west by a lofty headland 800 feet in height, and there are no breaks or gaps in the surrounding semicircle of mountains comparable to those made by the Carei and Boirigo Valleys.

The subject of disease among the native population of the Western Riviera has already been treated of, and the remarks made apply in the main, not only to San Remo and Mentone, but to the more sheltered parts of the Riviera generally. With reference to the occurrence of consumption at Mentone, the testimony of the late Dr. Bottini is as follows:—

'I can affirm without any prejudice, that if pulmonary consumption is not unknown at Mentone, it is there of very rare occurrence. According to my statistics, out of every fifty-five deaths among the natives, one only is due to phthisis.'

MONACO.

Monaco is situated on a small elevated promontory which juts out into the sea, about ten miles from Nice and five from Mentone. It is reached from the railway station either by a broad carriage-road which leads to the summit of the promontory, or by a steep pathway branching off from the road on the right: ascending to it by the carriage-way, on the left, lies the very pretty little port of

Monaco, the ancient port of Hercules; around this is the lower or new town, and a little distance beyond, the Casino of Monte Carlo, also on a hill but at a less elevation than Monaco. At the end of the promontory are some very pretty and well-kept Public Gardens with a terraced walk at a considerable height overlooking the sea; from this point a fine view is obtained eastward of the coast-line as far as Bordighera, but on the west the view is shut out by Cap d'Ail, beyond which, although not visible from Monaco, and at some miles distance, is the point of Villefranche near Nice, stretching far out into the sea, with the Golfe de St. Hospice between the two points.

On looking over the parapet I was not a little surprised to find that, from the sea upwards, the face of the promontory was densely covered with a large quantity of flourishing Prickly Pear, the effect produced by it being very curious. Quitting the gardens, the upper or old town of Monaco is entered; in the midst of this stands the palace of the Prince of Monaco, the open space opposite to which, on the occasion of my visit, presented a somewhat martial aspect. A company of smartly dressed soldiers were standing with arms piled; on one side of the square, cannon were ranged, and on the other, many piles of cannon balls, for the use of which however it is hardly probable that an occasion will speedily arise. The descent may be made from this point by the pathway previously referred to.

Having passed through the lower town, which is composed of several streets with hotels, pensions, and villas, nearly all of recent construction, we come to a little promenade round the port, fringed with a row of trees, chiefly Oleanders, and we notice on the left the very pretty little Chapelle de Sainte Dévote in a picturesque position, as seen through one of the lofty arches of the railway viaduct.

Having completed the circuit of the port the ascent is now made by a very beautiful balustraded terrace to the Casino of Monte Carlo.

MONTE CARLO.

The Casino, now a very handsome building, is placed on the summit of a small hill, just above the terrace previously referred to, the principal entrance being on the north side; it contains not only the Salons devoted to gaming, but also a fine concert-hall and a theatre just completed. The band plays twice a day and consists of first-class musicians. Standing on the steps of the Casino and facing the north, on the left is seen the Hôtel de Paris, which has the reputation of being one of the best hotels in Europe, and on the right a large restaurant and some handsome rooms for the sale of *objets d'art et de luxe*. Opposite the Casino is the avenue leading to the carriage-road by which it is usually approached, while on either side of the avenue are the admirably kept and most beautiful gardens of the Casino. These contain some graceful Palms, Bananas, Aloes in full blossom, many rare Cacti, Bamboos, &c., and they abound in a great variety of rare and handsome trees chiefly evergreen, shrubs and flowers. Amongst the trees are some very fine specimens of the Norfolk Island Pine, Araucaria excelsa. I do not know if the fruit of the Banana ever ripens at Monte Carlo, but it does so in a few well-sheltered situations on the Riviera. On casting the eye around, a scene rarely to be equalled of beauty and grandeur is beheld, the bare grey mountains rising to a height of some thousand feet in varied and elegant outline; to the east Roccabruna is seen occupying a commanding position, as also the mountains forming part of the Mentoneau amphitheatre, while high up, on the face of the Turbia, the Cornice road is visible, from which a glorious view is obtained.

Descending from the Casino eastward, we enter the exceedingly pretty little village of Monte Carlo, partly encircling a small bay which terminates in Pointe Vecchia,

the village being composed chiefly of villas, some of which are placed in very sheltered situations; in one of these, Villa des Enfants, I noticed some fine Heliotropes in full blossom, not a leaf having been touched by the late frosts. The garden of the house next to it, Villa Eldorado, occupied by the French Consul, was as full of flowers as if it had been the middle of summer in England, and it contained some rare plants and shrubs. I saw a kind of Prickly Pear with as many as forty small pears on a single leaf or section, and a very handsome Solanaceous plant covered with bunches of large, oval yellow and red berries. Below these villas, close to the railway were many Lemon and Orange trees growing freely and covered with ripe fruit.

From the position of the lower town of Monaco and of Monte Carlo, both lying on the eastern side of protecting hills, and also from the condition of the vegetation, it was evident that both these little towns, especially the latter, enjoy an exceptionally warm winter temperature; indeed in the spring they must become too warm for most persons. On the day of my visit, the 16th of January, the weather was as warm as a summer's day in England. I was rather amused at hearing a lady endeavour to explain to her little girl that it was really winter and not summer.

The old town of Monaco, standing high on the promontory and not enjoying any special protection, must be much exposed to winds, although the vegetation in the Public Gardens did not show any signs of having suffered therefrom.

The road from Pointe Vecchia to Mentone skirts a very beautiful little bay terminating on the west in the low Olive-clad promontory of Cap Martin; the road is full of interest all the way, here the Olive trees are replaced to a large extent on the sea side by a great many very fine Carouba trees, already displaying their curious fructification, while the ground is covered with large handsome light-green Euphorbia bushes, the size of many of which is really remarkable; the species which attain the largest

dimensions are Euphorbia dendroides L., and E. characias L. Firs are seen growing up the mountain sides, and here and there the Pyramidal Cypress, constituting a striking feature in the landscape; Lemon trees laden with fruit are also seen in abundance. Looking out to sea an exquisite view was obtained of Corsica, with its picturesque snow-clad mountains, faintly lighted up from time to time by the sun. In front, high up on the land side, lay Roccabruna, best seen from the Chapel de Saint Roman, near the torrent of the same name, which marks the boundary between the principality of Monaco and France. Just below Roccabruna a broad paved path with occasional steps ascends to the town, which is built upon the conglomerate, of which portions are seen in cuttings by the road side below the town, but on a very much smaller scale than at Ventimiglia.

Still further on and near to Cap Martin a road is given off which traverses the cape and by which Mentone may be also reached. All along the road from Mentone to Monte Carlo, a constant rattle of carriage-wheels was heard, numbers of people hastening to take part in the gambling and other attractions there nightly provided, Cannes and particularly Nice sending still larger contingents. On reaching Mentone, the day's excursion was brought to a pleasant termination by the view of a fine sunset, seen to great advantage from the promenade in the western bay.

VILLEFRANCHE.

Villefranche has been described by some medical writers as possessing in a high degree the characteristics necessary for a health resort, and, being only a short distance from Nice, it has been considered that it might be made available for those invalids who require more warmth and shelter from the winds than that city affords.

Villefranche is reached from Monaco by railway, and

from Nice both by railway and the road, it being distant from the former seven and from the latter four miles. At present there is no carriage-way from Monaco to Villefranche, although a road nearly on a level with and running beside the railway is in course of construction, which when completed will join the lower road, so that in order to reach Mentone and the towns eastward of the Riviera it will no longer be necessary in all cases to make the circuitous and difficult ascent by the upper or Cornice road; although this lower road will not command the magnificent prospects of the upper one, yet, running under the mountains and skirting the picturesque shore, it will be extremely beautiful and the traveller, in place of being hurried forward as he is now by the railway, will have ample time to admire the scenery. Shortly after leaving Monaco the railway rounds in succession Cap d'Ail, Pointe de Maba, and Pointe Gabet; and about the centre of the Golfe de St. Hospice the station of Eze is passed, but before reaching it some very lofty and dangerous rocks are seen through which the railway has been cut; these mark the scene of a frightful accident which occurred in 1872. One stormy night, the last train from Monaco to Nice came into contact with a mass of rock which had fallen on the line, and which was not visible owing to the darkness of the night. The old village of *Eze* occupies a commanding situation, being perched on the top of a conical mountain, and was formerly a stronghold and place of observation for the pirates who infested this coast. The climate around Eze, judging from the vegetation, must be very mild. I there noticed an Acacia in a much more advanced condition than any I had seen elsewhere, it was indeed just coming into blossom, and this on the 20th of January. A little further on *Beaulieu* is reached, which also must possess a mild climate, as it lies well under the eastern side of the projecting promontory which forms one side of the nearly landlocked bay or 'roadstead' of Villefranche, and since also Lemon trees flourish there without any special protection. Owing to its situation, four hotels and some

villas have been erected, and it seems likely that Beaulieu will become a place of some importance.

The vegetation between Monaco and this place is very similar to that between Mentone and Monaco, that is to say the Carouba tree supplants to some extent the Olive, and the really handsome Euphorbia bushes are everywhere seen springing out of and helping to give verdure to the otherwise comparatively bare rocks. From Ventimiglia to San Remo, and still more to the east, the ground is so thickly covered with Olive trees that there is really no room for either Carouba trees or Euphorbia bushes, comparatively small specimens of which are only seen here and there, the former chiefly in gardens.

The next station the train stops at is Villefranche, the old town being placed on an elevation on the western side of the roadstead; from this point the railway continues almost in a straight line to Nice running at the base of Mont Boron, which forms the western boundary of the bay, Cap de Mont Boron having an elevation of about 600 feet. The high road runs round this promontory, and the scenery as viewed from it is very picturesque; the bay is open to the south and is protected in every other direction, but the shelter in places is not very perfect, owing to the fact that the surrounding hills attain no considerable elevation, although those to the north are the highest, and that there is a gap both to the east and west, through which the winds find access to the bay. Nevertheless there are many sites in sheltered positions suitable for houses. On the western side the rocks rise up abruptly, attaining a considerable elevation, and the sun consequently disappears from view at a very early hour, leaving the space beneath them in shadow, hence this situation, although extremely sheltered is unsuitable for the erection of houses intended for the occupation of invalids. Notwithstanding the beauty of the little bay of Villefranche, no hotel has yet been built there, nor indeed any available houses. Near the old town is a small Port and also a Fort. At the back of the town some Olive trees extend for a short distance up the sides of the mountains, but they are somewhat

scattered, while Mont Boron is crowned with Fir trees, but the mountains to the north are for the most part grey and bare. From Villefranche the road, as already stated, winds round Mont Boron, and, looking across the bay, through the depression to the east previously referred to, a very beautiful view is obtained of the Golfe St. Hospice, of Roccabruna, and of the coast-line as far as Bordighera.

NICE.

After rounding Cap de Mont Boron the road descends and here an extensive and magnificent view of Nice is disclosed. Just before entering the city on either side of the road are some fine villas; the garden of one of these thus early in the year, the middle of January, was full of Carnations in blossom, while lying immediately below on the left were some beautiful grounds, with green lawns, many evergreen trees and several stately Aloes in flower. Looking around so as to embrace the whole of the prospect, first part of Nice with its hundreds of villas is seen nestling amongst the trees, then the Olive-clad hills, next the picturesque range of encircling mountains and beyond these the peaks of some of the snow-clad Alps; while lastly, stretching far out into the sea, Antibes, the Islands St. Marguerite and St. Honorat and the ever-varying but always lovely Esterels, were plainly visible; the whole forming a scene such as I have not beheld elsewhere on the Riviera, and it at once became apparent that to Nice must be accorded the palm for surpassing loveliness of situation and surroundings.

The city of Nice faces the south and contains over 40,000 inhabitants. The area enclosed by the mountains is very considerable, and the city is divided into two parts by the broad bed of the Paillon river, which is crossed by several bridges. The stream flowing in the bed is usually small, but after heavy floods becomes swollen, bringing down from the mountains a vast quantity of earthy matter, stones, rocks, and sometimes, it is said, even trees. Here

also, as in so many other cases, the river bed forms the common washing-place for the city, and hundreds of women may be daily seen steeping the clothes in its somewhat sewage-polluted water, while garments of various kinds are spread out by thousands to dry. On either side of the river is a broad promenade, that on the eastern side being skirted by a row of Plane trees, and that on the western by Evergreens; with, at the corner of the Quai Massena, a very large Eucalyptus tree, from which a row of splendid Palms, now in full fruit, extends to the Public Gardens, which are filled with many beautiful and rare trees and shrubs. The Palms here are remarkable not only for their size and beauty but for the abundance of their fruit; many of the bunches were so large that they must have weighed several pounds, and the dates were as close together as grapes on their stalks. A little way from the sea, the bed of the river has been arched over for a short distance and a beautiful garden made on the space thus gained; this is thickly covered with fine evergreen trees including the Eucalyptus, and notwithstanding the exposed situation they are apparently unaffected by the northerly winds which come down the valley. Along the Promenades or Quays on either side of the river are rows of very attractive shops; while facing the sea is the handsome and extensive Promenade des Anglais, skirted with Palm trees. Here at 3 o'clock in the afternoon of the 21st of January, under the brightest of skies, and looking on to the bluest of seas, over which innumerable white-winged gulls were skimming, were hundreds of people sitting together in groups and enjoying the warmth of the brilliant sunshine under the shade of their many-coloured umbrellas.

There is a great absence of sea-birds at San Remo and the neighbouring towns, indeed they are rarely ever observed there: I was the more surprised therefore to see them flying round a ship in the small bay of Villefranche in great numbers, and also to meet with them again at Nice. Their presence at Villefranche was no doubt to be explained by their being attracted to the refuse food thrown

overboard from the ship, and at Nice by the sewage discharged into the sea; these birds are thus as useful as they are beautiful, belonging as they do to the great army of Nature's scavengers.

The foregoing brief description will enable the reader more readily to understand the remarks now about to be made relative to the climate of Nice.

The area enclosed by the surrounding mountains being so considerable, it follows that some of these are so far from the city as to lessen the protection which they would otherwise have afforded: again, none of them reach any great altitude, the highest, Mont Chauve, being but 2700 feet; the elevation moreover varies greatly in different portions of the range, while lastly, there is a complete gap to the north-east, formed by the valley of the Paillon, through which the Bise or north-east wind is admitted to the city, and on the north-west another depression, through which the Mistral or north-west wind finds access. Nice is therefore insufficiently protected by its beautiful encircling mountains, especially from the north-east and north-west winds; when these blow, the city is liable to sudden and great changes of temperature; changes which are somewhat dangerous even to those in health, and positively injurious to persons suffering from lung disease. Were Nice better protected from objectionable winds, the climate would be nearly equal to that of the most favoured of the health resorts of the Western Riviera. Like that of the Riviera generally, it is, even in winter, bright, sunny, dry and stimulating. The average annual temperature is 59·48, and the three months' winter temperature 47·82, it is therefore colder than either San Remo or Mentone; the rainfall amounts to 25 inches and the number of rainy days according to De Valcourt to 70, being greater than all the other towns of the Riviera, with the exception of Mentone. See Chapter 3.

Although therefore the climate of Nice is at times trying and treacherous, and hence unsuited to most invalids, there are yet some who derive benefit from its stimulating and bracing qualities; as those suffering from

simple debility, atonic dyspepsia, and scrofulous affections. For some aged people it also affords a good winter retreat, provided they are on their guard and conform to the exigencies of the climate.

It appears that intermittent fever or ague was formerly of very frequent occurrence in Nice and its vicinity, and cases still do occur from time to time; this liability is explained by the fact that the land lies in some places below the bed of the Paillon river, it being also subjected to frequent irrigation to promote the growth of the vegetation; this is especially the case on the right bank of the river. Those persons who become affected by the fever while living at Nice itself are believed to have contracted it by visiting the malarious district. As the city extends and the land becomes reclaimed, better drained, and more built upon, such attacks will doubtless be less frequent. The spot where Carabaçel stands was once a swamp, but its character is now so changed that no fear need be entertained of contracting the disease from a residence there.

Very much has been written on the subject of the climate of Nice; at one time there was a general concurrence of medical writers in its favour, but later, on a closer examination of the facts, there has been nearly an equally general condemnation: the truth really lies between these extremes, but I will now quote the opinions of some comparatively recent writers.

Mr. Aspinall has written as follows:—'I spent four months in Nice, and though in many respects a delightful winter residence, the air being so clear and exhilarating, like a summer's day iced, that it is almost impossible to feel anything approaching to depression of spirits, yet at the same time it is very treacherous, as after being overheated with the bright, hot sunshine, you constantly meet the bitterly cold winds sweeping through the gorges of the snowy mountains.'

'Nice,' states Dr. Prosser James, 'is the type of a dry stimulant climate. So dry is the air, so exciting its nature, that many on their arrival suffer from thirst and

lassitude, the skin becoming harsh, the lips parched, the head continually aching—in a word, positive fever supervenes. A glass of claret is a stimulant. It is hot in the sunshine, cold in the shade. The days are hot, the nights cold. The winds are excessively changeable; four or five variations in a day may often be noticed. They are also very powerful, especially in spring; the north, coming directly along the Pagliono from the snow-clad Alps, is piercingly cold. The Mistral is mostly felt along the Promenade des Anglais, especially in the afternoons of the first three months of the year, just the dates and hours when resistless fashion still beckons its victims to drive. And yet I am not about to join the denunciations heaped upon the climate.' 'To certain leuco-phlegmatic or melancholy temperaments, a sojourn at Nice may be a draught of new life. Where debility co-exists in several functions; where chronic disease makes little or no progress; in convalescence from exhausting illnesses; in not a few nervous ailments, notably in some forms of paralysis, and in most strumous cases, it cannot be surpassed.'

Dr. C. T. Williams has thus expressed himself:—'The higher chain of mountains does not afford by any means complete shelter to the town, partly on account of its distance and partly on account of various gaps and depressions in the range. The chief gap in the Nicean amphitheatre is to the north-east, and is caused by the wide valley of the Paillon, a torrent which flows down from the snows and glaciers of the Col de Tende, and discharges itself into the Mediterranean at Nice. The Bise or north-east wind reaches Nice through this valley, and is very cold and cutting. The Mistral comes through a depression to the north-west and is more felt here than at any of the four health resorts.' 'The climate of Nice itself is warm, very dry and rather stimulating, but its chief defect lies in its liability to sudden and rapid changes of temperature which arise from its imperfect protection from northerly and easterly winds. When snow falls on Mont Chauve, a mountain to the north of Nice, and the wind blows from that quarter, a bitter state of atmosphere is experienced

in the town. Although the uncertainty of climate precludes Nice from being suitable for the majority of pulmonary complaints, the absence of moisture and the combination of bright sunshine and saline breezes renders it eminently suitable for rheumatism and gouty affections, also for the atonic forms of dyspepsia and for many scrofulous complaints.'

Dr. Walshe, in his work on diseases of the lungs, thus sums up his own observations of the actual effect of the climate of Nice in genuine phthisis:—'1. In no stage, in no degree, in no form of tuberculisation of the lungs and no matter what be the temperament of the individual, is Nice proper a safe winter resort. 2. The climate is most dangerous in cases with hæmoptoic and laryngitic tendencies. 3. It is a mistake to suppose, that if the expectoration be abundant and the skin disposed to act freely, *ergo* Nice will of necessity benefit the patient. It may disagree with him more than with a fellow-sufferer whose bronchial and cutaneous secretions are in the precisely opposite condition.' For those who are in good health there are few more delightful cities than Nice, whether as regards climate, natural beauty, or society. It is these attractions which annually bring together from all parts of the world many thousands of its wealthier inhabitants, who desire to escape the rigours of more northerly climates and to spend their lives as pleasantly as they can.

CARABAÇEL.

Nice itself is much exposed, as we have seen, to the colder winds, and to sudden vicissitudes of temperature. In order to obviate to some extent this disadvantage, hotels and houses have been erected in the more sheltered situations of Carabaçel and Cimiez.

Carabaçel is placed at the foot of the hill or ridge on which Cimiez is situated; it has a south-westerly aspect, and consists of four hotels, and a few pensions and villas, the whole forming a short boulevard. The hill under which

Carabaçel stands is but little higher than the houses themselves, and at so short a distance from Nice that from the Place Massena it is reached by the Rue Geofredi in less than ten minutes. Carabaçel is thus scarcely to be regarded as even a suburb of Nice, but it really forms an integral portion of the city. Its position is a comparatively sheltered one, and persons while actually in the houses no doubt feel the winds and changes of temperature much less than in Nice itself. There are also one or two fairly protected walks near to Carabaçel, but owing to the proximity of Nice and the attractions which that city affords, but few persons are able to resist its many temptations. The chief advantage of Carabaçel consists therefore in its somewhat sheltered position, but this alone is not sufficient to warrant its recommendation as a winter residence for persons suffering from consumption and most other diseases of the respiratory organs.

CIMIEZ.

The hill or ridge upon which Cimiez is built is a long and narrow one, running in a north-westerly direction with a valley on either side and with protecting mountains of no great elevation at a considerable distance away. Starting from Carabaçel the road gradually ascends for fully two miles until at the Quatre Chemins it must have attained a height of three or four hundred feet. Near to the Quatre Chemins is a very handsome Monastery and the remains of a Roman Circus. The houses erected upon the hill are scattered at intervals along either side of the road and consist for the most part of large villas and mansions, usually enclosed by walls and commanding doubtless lovely views of the surrounding scenery, although of this but little is seen from the high road, owing to the walls on either side. There is, I believe, but one hotel and one pension, and there are no small houses or villas, no town or shops.

Cimiez therefore, situated on a narrow and lofty hill

with its protecting mountains at some distance and these of no very great elevation, is only imperfectly sheltered: the summit of the hill being exposed to winds must necessarily be cold in winter, as also must be its eastern side which is swept by the winds that blow down the valley of the Paillon. The most protected sites are those on the southern and western slopes, but most of the houses hitherto erected are upon or near the summit of the hill; moreover they are inaccessible to most invalids, especially those suffering from lung disease, except by means of a carriage.

Being at a considerable distance from the sea, and the hill being clothed with Olive trees, the climate of Cimiez is no doubt somewhat sedative and would therefore suit many who find a residence near the sea-shore and in Nice itself too exciting.

I noticed a few Orange but no Lemon trees, although these are no doubt to be found growing under the shelter of walls. In Nice itself Orange trees are seen in considerable numbers, being evidently cultivated for the sake of ornament, but of Lemon trees there are comparatively few, and these confined to certain well protected localities.

On descending the hill from Cimiez, the Esterels once more came into view; this time they were in deep shadow with their graceful outlines clearly defined against the ruddy sunlit sky. It is only those who have lived near these mountains, as at Cannes, and have witnessed their ever-varying changes of aspect, being rarely twice alike, who can fully appreciate their surpassing loveliness.

CANNES.

Although not within the limits of the Western Riviera, Cannes, a town of about 14,000 inhabitants, is yet so near its western boundary, is of so much importance in itself, and possesses moreover so similar a climate that it would be an omission not to notice it in the present

work. It is situated on the shore of the eastern division of the Golfe de la Napoule, which is bounded on the east by the Pointe de la Croisette and on the west by the ever beautiful mountains of the Esterel with their graceful peaks, the highest of which, Mont Vinaigre, has an elevation of 2021 feet. It faces nearly south and is about nineteen miles from Nice. Westward from Cannes, the railway passes the little village of Napoule, then having skirted the Esterel mountains, St. Raphael is reached and a little further on Fréjus; while eastward, after leaving the Golfe de la Napoule, the railway skirts the Golfe de Jouan passing the village of the same name, until Antibes is reached on the western side of Cap d'Antibes; still skirting the shore, after a little time the town of Cagnes is passed, a striking object, being perched on the summit of a steep hill. As Nice is approached the railway crosses first the embouchure of the Var about six miles from that city and then the river Magnau.

To the north-east of Cannes is the village of Cannet; to the east Vallauris, famous for its pottery ware; and to the north the town of Grasse, so well known for its numerous scent-manufactories and for its preserved and crystallized fruits. Grasse is about eight miles from Cannes and may be reached by a small branch line of the railway; the hours of departure and arrival of the trains are however so exceedingly inconvenient and unsuitable that but few visitors are able to avail themselves of this mode of conveyance.

Like many of the other towns on the coast, Cannes may be divided into an old and new town; the principal part of the former is situated on Mont Chevalier, 147 feet high, and is crowned by the handsome church of the same name. While the old town thus forms a very conspicuous object, a very fine view is obtained from its highest point, of the Esterel mountains, the Islands Ste. Marguerite and St. Honorat, which lie nearly opposite Cannes about a mile from the shore, and of Cap d'Antibes. At the foot of the old town lies a small but convenient port, the water of which is deep enough to allow of the entrance of large

ships and steamers; many yachts also frequently seek its shelter.

What may be termed the new town is best described as consisting of one long street on the high or Genoa road, in which the principal shops are situated; opposite its western end and near the Hôtel de Ville is a large open space, the Cours, planted with trees and furnished with seats; this forms one of the principal promenades of the inhabitants, here the band plays on Sundays, and here also the large and well-supplied market is daily held. From the south-eastern corner of this space the handsome eastern esplanade, Boulevard de la Croisette with its broad carriage-drive is entered, which extends for about two miles in the direction of La Croisette. On the western side, starting from the Port, is a smaller or western esplanade, Boulevard du Midi, near the end of which are the very pretty gardens of the Square Brougham; it is intended to continue this esplanade next the sea as far as Napoule; from it there is a fine view of the Esterel mountains.

The hotels, pensions, and villas of Cannes lie either along the two esplanades, or extend for a considerable distance on the Genoa road east and west of the town, spreading over, it is stated, a frontage of about four miles. We learn from Messrs. Taylor and Riddett, the English Agents and Bankers at Cannes, that there are upwards of fifty hotels and pensions and nearly five hundred villas, from which fact some idea of the size and importance of this place may be gathered.

The vegetation corresponds in the main with that of the Western Riviera, the Lemon tree however is comparatively seldom met with and only where specially protected; the Orange tree occurs more frequently, but the only place in which I have seen it in any quantity in fruit was in the Jardin des Hesperides near La Croisette, the garden being enclosed on all sides by high walls. It should be stated, however, that the Orange tree is cultivated at Cannes rather for the sake of its blossom than for its fruit, the flowers being more valuable, since they are used in

large quantities for the preparation of Orange-flower water, so much consumed in the Cafés of France, and in the manufacture of Néroly, and other scents. It is to this circumstance rather than to climate that the paucity of Oranges seen at Cannes is to be attributed. The Olive tree grows abundantly, but the great and characteristic feature of the vegetation there is the Eucalyptus tree, which was first planted in this place 20 years ago and only made its way along the Riviera after its successful growth had been demonstrated at Cannes.

Another tree for which Cannes is celebrated is the Umbrella Pine, there being a little forest of splendid specimens of this remarkable fir, growing in the sandy soil near the railway to the west of the town. Some fine Cork trees are also occasionally seen, the Esterel mountains being, as has been elsewhere noticed, partially covered with them. Lastly, in the neighbourhood of Cannes and between it and Grasse, the white Jasmine; Tuberose; white Rose; a species of Acacia, A. Farnesiana; the Heliotrope; Geranium, and some other flowers, are extensively cultivated for the manufacture of scents, including essence or otto of Rose. Grasse is especially celebrated for its white Rose; Néroly, and other scents employed in the making of Eau de Cologne.

The environs of Cannes are very interesting, some of them even beautiful, and many drives and excursions may be made in its neighbourhood, to Vallauris, Cannet, Grasse, the Esterels and other places. A very favourite excursion in the spring is to the Esterel mountains, where numerous picnics take place, another, scarcely less beautiful is to the Islands Ste. Marguerite and St. Honorat, which may be reached in the season twice daily by means of a small steamer; the Myrtle grows on these islands as a thick brushwood.

The fortress on the Ile Ste. Marguerite possesses historical interest from its having been first the prison of the mysterious and ill-fated Man with the Iron Mask and subsequently of Marshal Bazaine; the room in which the former was confined is shown, as well as the precipice over

which the Marshal is said to have made his escape; the height is considerable and it would certainly be a feat for a heavy man to make the descent by a single rope, but with a rope ladder neither difficulty nor danger would be encountered.

Although the facilities for driving and riding at Cannes are considerable, they are less so for walking and this in consequence of the state of the paths and roads, which are almost invariably either very muddy or very dusty. I was never in a town of the size and wealth of Cannes where the roads were in so wretched and neglected a state; even in the main street the footpaths were so faulty and irregular as to be a positive source of danger to passengers after dark.

The drainage of Cannes is by no means perfect, bad odours are far from uncommon both in the main street and by the sea-shore; the arrangements made for the removal of the refuse of the town are in some respects very objectionable. During the winter I spent at Cannes, that of 1876–77, many of the inhabitants, including some of the shopkeepers in the principal streets, were in the habit of throwing the day's refuse of all kinds (and a very curious and unsightly mélange, animal, vegetable and mineral it often was) into the street, where it lay all night in large heaps to be trodden upon by the passers-by and to be ransacked by the numerous dogs of every description which infest the town; others placed the refuse at the doors of their houses ready for removal, while in very many cases it was thrown into the sea. So much refuse found its way into the Riou, the little stream which flows past the gardens of the Square Brougham, as to give rise sometimes to very bad smells, which must have been often a source of great annoyance if not of injury to the occupants of the houses in the immediate vicinity.

The refuse thus thrown into the streets, or exposed there in baskets, was usually removed each morning, but if it happened to be raining at all heavily, this needful operation was frequently postponed.

The town is said to be now supplied with an abundance

of good water, 'brought from the upper part of the river Siagne by an open conduit 31 miles long.' Unless this water on its arrival at Cannes be properly stored and filtered, it must from its conveyance for so long a distance in an open channel, abound in living productions both animal and vegetable.

I now proceed to treat of the climate of Cannes. The town is sheltered in a measure from the north wind by the mountains at and around Grasse, which however are distant about eight miles and are of no very great elevation, the highest not exceeding 1115 feet, and from the north-north-west wind by Le Tanneron, which lying nearer to Cannes reaches an altitude of over 1500 feet; to the north-west the shelter is less complete, the height at Les Adrets being but 758 feet, and the high road, or route de Paris, passes at a lower level between Les Adrets and Mont Vinaigre; again the Valley de l'Appie d'Amie terminates near the former. Westward at a distance of several miles from Cannes is the long range of the Esterel mountains, the highest, Mont Vinaigre, as already stated, attaining an elevation of 2021 feet; to the north-east is Cannet with an elevation of only 331 feet, Les Calvis 787 feet and Les Clausonnes 551 feet, while to the east is Vallauris, reaching to a height of 807 feet. The islands Les Lérins, which lie a little to the east of Cannes, being nearly level, do not prevent the free access of the southerly winds, although they doubtless contribute to modify the direction and force of the in-flowing waves and to render the sea between the Ile Ste. Marguerite and the shore less rough.

From these particulars it will be apparent that, while Cannes is more or less sheltered by mountains, the distance of some of these from the town is too great and the elevation of others not considerable enough to afford complete protection, especially from the northerly winds. It is well known that Cannes suffers considerably from the north-west wind or Mistral, and when the roads happen to be, as they frequently are, deep in dust, the effect is such as not soon to be forgotten, the town and

country around particularly along the road to Grasse, being enveloped in a thick cloud of yellow dust extending high into the air.

According to the observations of Dr. de Valcourt the mean three months' winter temperature beginning with December is 49·64, spring 57·38, summer 72·96, autumn 60-98, of the entire year 59·90, and that of the six season months beginning with November 51·71, but there would appear to be some miscalculations and I make it 51·08 only. According to Dr. Marcet the mean three months' winter temperature was 49·53 for the four seasons 1874–78 and 47·46 for that of 1878–79, while the mean six months' temperature for the same years was 51·60 and 49·80 respectively.

Dr. de Valcourt gives the absolute shade minima of the six season months in order as follows: 31·28, 20·12, 27·14, 29·30, 29·30, 37·76, and the absolute maxima, 71·60, 71·96, 66·38, 69·80, 73·58, and 77·00.

The relative humidity of the air at Cannes, the point of saturation being represented by 100, according to De Valcourt varies between 63° and 69°. Dr. Marcet makes it 72·63 for the four seasons 1874–78, and 74·83 for 1878–79.

De Valcourt gives the number of rainy days at Cannes for the six months beginning with November as 38, compared with 97 for Paris during the same period, and the rainfall at Cannes at rather less than 21 inches; the number of rainy days for the whole year at Cannes according to the same authority is 70 as against 140 for Paris, 178 for London and 206 for Edinburgh, and the annual rainfall at Cannes as about 35·43 inches. The same writer gives the number of fine days without clouds during the six months above referred to, as 92 compared with 12 in Paris, of days of sun and cloud 64 as contrasted with 89 for Paris, and of days without sunshine 25 at Cannes and 80 in Paris.

From the preceding data it appears that the climate of Cannes has very much the same characteristics as that of the Riviera generally, it being dry, bracing and stimula-

ting, with, according to Dr. de Valcourt, a mean three months' winter temperature even higher than that of the eastern bay of Mentone and of San Remo, but with a mean annual temperature lower than either of these places. For further details the reader is referred to Chapter 3. The number of rainy days and the amount of the rainfall are greater than at Nice and still greater than at San Remo, while Cannes is much more exposed to the action of the northerly winds, including especially the north-west wind or Mistral, than either Mentone or San Remo

While Cannes therefore possesses a winter climate well suited for children, elderly people and many classes of invalids, especially those who require a stimulating atmosphere, it is not so well adapted for the majority of those suffering from affections of the respiratory organs as are the more protected places above named. For some cases the climate, like that of many parts of the Riviera, is too stimulating, especially near the sea; there is however a large choice of villas, some of them at a considerable distance inland, and where consequently the climate would be more sedative. Dr. C. T. Williams in the work already quoted has pointed out the suitability of Cannet, distant only two miles from Cannes, as a winter residence for those requiring a more sedative climate than is to be obtained at Cannes itself, and since many villas have been built at Cannet and Vallauris there is thus a further choice of situation.

CHAPTER VIII.

PORTO MAURIZIO—Vegetation—Climate. ONEGLIA—Vegetation—Climate. DIANO MARINA—Vegetation—Climate. ALASSIO—Bay—Surrounding Mountains—Vegetation—Meteorology and Climate. ALBENGA — Climate. CERIALE—LOANO—PIETRA—VEREZZI—FINALMARINA—Grand Road to Noli. NOLI—Fishing—Vegetation. SAVONA—Climate. ALBISSOLA—VARAZZE—MONTE GROSSO—Situation—Special Features—Vegetation chiefly Firs—Likely to become an important Health Resort. COGOLETO—Vegetation. ARENZANO—Beautiful Situation—Vegetation—Mild Climate. VOLTRI—Sulphur Springs—Vegetation. PRA—Vegetation. PEGLI—Vegetation and Climate. SESTRI—Vegetation and Climate. CORNIGLIANO—Suburb of Genoa—Comparative absence of Vegetation. GENOA—Situation—Beauty—Vegetation—Climate.

PORTO MAURIZIO.

THAT portion of the Riviera which lies to the west of San Remo is not only the most picturesque, but the most important, since it is here that the chief health resorts are situated: that lying to the east is also very beautiful, and between it and Genoa there are situations well adapted for winter stations, and several of these have already acquired some amount of reputation. The principal towns will now be noticed in the order of their occurrence, the first being Port Maurice or Porto Maurizio.

After leaving San Remo the train first stops at the station of Taggia, near the entrance of the broad valley of that name, on the west bank of which the town is situated, as already noticed; then in succession at the towns of San Stefano, San Lorenzo, and Porto Maurizio, the latter distant about fourteen miles from San Remo.

The hill-sides between Capo Verde and Porto Maurizio,

as seen from the railway, present in winter a barren, stony and unattractive appearance, due in part to the railway cuttings; but there still remain the charming sea-coast and the curious old towns lying between the two capes or points.

Porto Maurizio is a place of considerable size and importance, with about 7000 inhabitants, and is built on a hill or promontory occupying a commanding situation on the west side of a little bay, with Oneglia at a much lower level on the other side. A small port lies to the east under the shelter of the hill, on the summit of which stands the very handsome modern church of San Maurizio with its beautiful marble columns. Opposite to this Church is the Municipal Palace, and on an elevation at a short distance on the right the very large convent of Santa Chiara, now used as a school and from which there is an extensive view of the coast and country to the west; the town also possesses a large Theatre and a 'Cercle.' From the front of the church there is a very fine view of the surrounding mountains; to the north at a distance of some miles is Monte Grande having an elevation of 4672 feet, while nearer the town are several Olive-clad hills with a valley on the west side through which flows a torrent. The eastern side of the hill is the most sheltered position, and here are several houses, the railway station, and a little further on, higher up, some villas; near these there is still room for the erection of a few more houses, but the space is a very limited one.

The valley to the west of the town forms a channel for the colder winds, and therefore is not a suitable site for the erection of houses for invalids.

It is probable that other sheltered sites exist in the neighbourhood of Porto Maurizio. In reference to this point Dr. Edwin Lee some years since wrote as follows: 'Other available situations for residences on this side (the west) are at the foot of the hill on which stands the village Pegli, and among the Olive plantations near the sea, a little raised above the shore-level. On the western side, a few minutes' walk from the town, is the commune St.

Lazarus, enclosed by hills on all sides but the south, and possessing a mild and equable temperature. A little further off northwards, about twenty minutes distant, is the village of Artallo, situate on the acclivity of a hill, to which leads a good road, and where, on account of the superior warmth, natives of the town and neighbouring country affected with pulmonary disease are frequently sent.'

With respect to the climate and temperature, Dr. Demara, in a letter published in the journal of the Royal Academy of Medicine of Turin for 1865, states: 'the district of Porto Maurizio enjoys a climate so mild that the thermometrical observations record the mean annual temperature to be 14 Centigrade = 57 Fahrenheit; the maximum of heat averaging from 24 to 25·6 C.: = 75 to 77 F.; the maximum of cold, from 2 to 3 below the freezing-point.'

There can be no question that the winter climate of Porto Maurizio is considerably colder than that of San Remo and the other more sheltered health resorts. This is proved not only by the observations of Dr. Demara but by the character of the vegetation, which consists almost exclusively of Olive trees, there being but few Orange trees, scarcely any Lemon and very few Pepper or even Eucalyptus trees, these being found only in the most protected positions and chiefly on the eastern side. The Olive tree however, is seen here and on the neighbouring hills, around Oneglia and Diano, in the greatest abundance; in fact this district is celebrated for them. To such an extent do they cover every available space that it is only on the most exposed and inaccessible situations that room exists for the growth of other trees, shrubs or even brushwood, as Firs, Juniper, Myrtle, and Prickly Broom. Euphorbia bushes, so conspicuous in other districts, are nowhere seen along this portion of the Cornice road.

I would remark therefore in conclusion, that although a few houses have already been erected here, and there are still some eligible building sites, Porto Maurizio, in my

opinion, does not possess the physical conformation and climate necessary to enable it to become an important health resort.

There are a few villas to let during the winter, and near the railway station there is the comfortable-looking but small Hôtel de France.

ONEGLIA.

The next town to Porto Maurizio, and about a mile from it, is Oneglia, also a place of some importance and with about the same number of inhabitants: the road to it runs nearly on a level, and the town, which is situated on the right or east bank of the broad and open valley through which runs a considerable and rapid stream, the Impero torrent, is approached by a handsome suspension-bridge thrown across the stream. The only architectural feature of the town which attracts attention are the massively built piazzas under which are some of the principal shops. Oneglia has the aspect of a thriving place of business, being the market-town for a number of contiguous villages. Large quantities of maccaroni in every variety of form and size are made here, and many shops are devoted to its sale. Under the piazzas are piles of trays on which the maccaroni is spread out to dry, and before some of which women are seated, cutting the long pipes or tubes into different lengths. Oneglia possesses a port of much the same character and size as that of Porto Maurizio and it is also in direct communication with Piedmont and Turin by a carriage-road, which, after traversing the Impero Valley, enters that of Tannaro; this communication is doubtless a very important one for both Oneglia and Porto Maurizio, and there is now a project on foot for making a railway up these valleys which, if it be carried out, cannot fail to have a very great effect on the future prosperity of these towns. On the eastern side of Oneglia some villas have been erected in a sheltered position, and there is still space for a few more. I noticed a small so-called hotel, named after Her Majesty Queen Victoria,

which, notwithstanding its grand name, is little more than an inn.

Situated at the mouth of an open valley, down which the northerly winds must at times blow with considerable force, Oneglia has no claims to be regarded as a health resort. The climate is certainly not less cold than that of Porto Maurizio; there is the same comparative absence of Lemon, Orange and those other trees, as the Pepper and Eucalyptus, which denote mildness of climate. The neighbouring hills and valleys are however densely covered with Olive trees, planted on stone-faced terraces which rise by hundreds and even thousands one above the other until they reach the summits of the hills. Oneglia is noted for the excellence of its olive oil.

DIANO MARINA.

About three miles from Oneglia is the small town of Diano Marina. The road to it from the former place makes a considerable ascent, and is skirted by a few Pine trees and here and there by Myrtle, Juniper, Rosemary, and Prickly Broom; this road leads to the top of the lofty and bold cape, which forms the western boundary of the bay, in the centre of which Diano Marina is situated. From this point a fine view is obtained; first of Capo Cervo on the opposite side of the bay and beyond it of Capo delle Mele, the eastern boundary of the next bay, while near Capo Cervo is the town of the same name, and to the north of Diano Marina, on the summit of a small hill, is Diano Castello, and still higher up in succession Diano San Pietro, Diano Borello, and Diano Arentino, as well as other hamlets and buildings, the whole of these forming together with the surrounding mountains a really beautiful panorama. The descent to Diano Marina is very steep, and when the town is reached, it is seen that it stands near the centre of a small but shallow bay, with an encircling range of fine mountains which enclose a considerable space. The highest of the chain is Monte della Forre, reaching an altitude of 3330 feet, and lying well

to the north. On either side of the hill on which Diano Castello stands, is a valley through which a torrent runs, that in the eastern valley being the more considerable.

Were it not for the shallowness of the bay, particularly on the western side, and for the small valleys running on either side of the hill already mentioned, it might have been affirmed that Diano, with its bold headlands, its lofty mountains protecting it on the north, as well as the large size of the enclosed space, possessed all the requisites of a winter health resort; the defects however referred to render it exposed to the west wind, and in some degree to the northerly winds, though from the east wind it would appear to be well screened. Nevertheless there are many well-sheltered situations in which invalids might pass the winter with advantage; but at present there is no accommodation for them, not even an hotel. Fortunately the railway runs at the back of the town, the principal frontage of which is towards the sea, with sufficient space for the construction of that essential of every sea-side resort, a commodious esplanade; this the authorities contemplate making. In time possibly, Diano Marina may become a place of some importance; it certainly possesses much natural beauty. There was nothing in the vegetation which fell under my observation which denoted a special mildness of climate, but this may be owing in part to the fact that scarcely any attempts have yet been made to cultivate any other tree than the Olive, which here also reigns supreme and thickly covers the hills and valleys.

ALASSIO.

Shortly after quitting Diano Marina, the railway crosses the torrent and valley of Nervo, and as the town of Cervo is approached it is seen that it occupies a commanding position on the Cape of the same name; as viewed from the railway one of its churches presents a very striking appearance, perched as it were on the very edge of the mountain and its outlines being particularly picturesque. After rounding Capo Cervo the railway skirts

for some distance a small bay bounded on the east by Capo delle Mele as far as the station of Marina d'Andora; near to this is the haunted castle of Andora, as also the village of Rollo. The railway now leaves the shore in place of skirting Capo delle Mele, and shortly after crossing the river Merula, which sometimes overflows its banks and floods the surrounding country, it approaches the shore once more, near the middle of the bay of Alassio and close to the village of Laigueglia separated from Alassio by a short interval only. The carriage-road from Andora ascends the summit of the Cape, from which there is a very fine view, not only of the bay of Alassio but of Albenga and the bay next it, bounded on the east by Capo Noli, in which lie the towns of Ceriale, Loano, Pietra, Verezzi, and Finalmarina.

The bay of Alassio, called Porto Salvo, is somewhat unequal; Capo delle Mele, forming its western boundary, is a bold headland 725 feet in height, running well out into the sea this cape divides the Western Riviera into two nearly equal portions, and it is affirmed that there is a perceptible difference in the vegetation on the two sides of the Cape, especially shown in the Olive trees on the east side, which, it is stated, yield an oil of inferior quality. The headland, Capo di Santa Croce, on the eastern side, is unfortunately much smaller and does not extend nearly so far out, hence the bay is here more shallow and less protected, particularly from the east wind. The island of Gallinara would appear to be the natural eastern boundary of the bay, and no doubt at one time it was connected with the mainland; had it still been so, the protection would have been perfect.

Although Capo di Santa Croce does not afford the full shelter required, yet that which it does give is most important, but, strange to say, at the very point of the Cape a large stone-quarry is being worked, and to this more than a hundred feet of the Cape have already been sacrificed. The mountains surrounding the bay of Alassio, it should be remembered, belong to the chain of the Alpes Liguriennes; they present a very picturesque appearance,

but their elevation is not very great, nor the area enclosed, especially on the eastern side of the bay, considerable. Laigueglia and Alassio are protected on the north mainly by Monte Pisciavino, which has an elevation of about 1900 feet: in proportion to their height however, the protection which the mountains afford is very complete, since there are no considerable valleys to admit the wind, and no torrents of any magnitude. These towns are about 28 miles from San Remo, face the south-east, and lie spread out along the shore for a considerable distance, each having the usual sunless street running from end to end; there is no esplanade or road facing the sea. The population of Laigueglia is 2800 and that of Alassio 5500; the latter town was once surrounded by a high wall or rampart, which however, is now being gradually pulled down; these towns are inhabited chiefly by fishermen, sailors and shipwrights. The fish caught consist principally of Anchovies and Sardines; the latter are obtained in such abundance that there is a factory here for their preservation. At Laigueglia there is a very fine private collection of Italian and other birds made by the late Signor Musso, for the privilege of seeing which I am indebted to the courtesy of his son, Signor Benedetto Musso, by whom the collection is about to be enlarged.

The walks around Alassio are very pretty, one is to the town of Moglia, a little distance to the north; the drives at present are those along the Genoa road and up the valley of Albenga; the views are very fine, especially that from the Chapel of Santa Croce, which commands some of the towns lying in the valley of Albenga and Noli; there is also a good view from the Roman road to Albenga.

The railway fortunately runs a little behind Alassio, so that the construction of a promenade at some future date is practicable. The formation of this is rendered the more indispensable in the case of Alassio by the fact that it does really possess an excellent beach of fine sand.

With respect to the vegetation around Alassio the character of this here becomes changed a good deal, the

number and size of the Olive trees are diminished, the Carouba tree is once more met with in great abundance and beauty; Orange trees occur in large numbers, some of them very handsome and many on this, the 4th of April, still laden with fruit, their presence in such quantities giving a very pleasing effect to the gardens around both Laigueglia and Alassio. Lemon trees are less frequently seen and are often trained like espaliers or even against walls and nearly always under shelter; indeed even the Orange trees are usually grown in enclosures, and I noticed that the tops of many of the trees in some situations were a good deal affected by the severity of the late winter. Palms are seen sparingly here and there; of the Eucalyptus, the Pepper tree and flowering shrubs generally only a few examples are met with. Of wild flowers there is a profusion; the white Allium and the blue Borage grow in large beds, sometimes intermingled, when they present a very beautiful appearance.

Alassio possesses many of the characteristics necessary for a health resort, but there is scarcely space for a large town and it is certainly colder than either the eastern bay of Mentone or San Remo. This is the necessary result of the less elevation of the surrounding mountains, and of the comparative exposure of the eastern side of the bay; that it is colder is proved by the character and condition of the vegetation.

There are as yet no data by which the average three months' winter, six months' season, or the mean annual temperature of Alassio can with certainty be determined. Dr. Schneer in his brochure on 'Alassio and its Climate,' has recorded observations for three years, taken daily at 8 A.M., 2 and 10 P.M. The temperature of the three winter months beginning with December was 9·97 C. = 49·94 F.; that of the six winter months commencing with November, 11·55 C. = 52·79 F. and the mean annual 16·64 C. = 61·95 F. These figures are very high, they in fact represent Alassio as being warmer than San Remo and even the eastern bay of Mentone, which is scarcely probable. Dr. Schneer compares the temperature of the

five coldest months of Alassio, Mentone, Nice and Cannes, commencing with November, and arrives at the conclusion that Alassio is the warmest of them all, the temperature for the period named being 11·05 C. = 51·89 F.; when however we come to examine the data given, it appears that the comparison is valueless, as the periods of the day when the observations were taken were different in each of the places specified.

. Between Laigueglia and the hills behind it there is no great depth for the erection of houses, but behind Alassio the space enclosed is much deeper; in both situations, especially the latter, there are many well-sheltered spots, but the best at Alassio are north of the railway, which would therefore have to be crossed every time that the town or shore be visited, and to make room for the erection of houses along the shore part of the old town would have to be sacrificed, and this result will no doubt follow in time to some extent. The pavement in the streets and the state of the roads are at present very bad, and both after rain are a succession of puddles, indeed the expenditure of a large sum of money is required to put the town in the condition required for a health resort. There are three hotels, one of them principally occupied by those who come here for the bathing season, but the number of villas hitherto erected may be counted on the fingers.

Dr. Schneer, in his little work on Alassio already quoted, states of the Sirocco or south-east wind, that it blows rarely, but that when it does, 'even strong men are oppressed with weariness and prostration and every one complains of headache and sleepiness.' In another place he writes:—'From my own observations, the result is that catarrhs are frequent, intestinal and bronchial, also bronchitis developing into inflammation of the lungs with caseous processes ending in tubercular phthisis. Many of the inhabitants of the place, and also of those who come here for health, are attacked by chronic pulmonary catarrh, by gastric diseases, by languor and anæmia of various origin, with nervous affections.'

The above quotations do not convey a very satisfactory

impression of the healthfulness of Alassio; but let us hope that the list of dangers incurred there is more formidable on paper than in reality.

ALBENGA.

From Capo di Santa Croce a good view of the bay of Alassio, bounded on the west by Capo delle Mele, is obtained, as also of the picturesque little island of Gallinara, under the shelter of which vessels are often seen lying snugly at anchor; on rounding the Cape there is a still more extensive and beautiful prospect, of Albenga and the several towns, including Finalmarina, lying along the shore of the large bay terminated on the east by Capo Noli. From Capo di Santa Croce, on a clear day the mountains as far as Genoa are plainly visible. A little way further on the road is cut out of the face of almost perpendicular and bare rocks which rise above it to an altitude of several hundred feet, and it runs at such a height above the sea, which lies immediately underneath it, that on looking over the parapet the head turns giddy and one is thankful for the protection it affords. The walk to Albenga from this point, a distance of about four miles, is very beautiful; after a time the rocks become clothed with vegetation, Olive trees appear, intermixed with fine Carouba trees and a few Firs; many shrubs are seen, amongst them the Coronilla and Prickly Broom, both now in blossom; the Euphorbia once more becomes almost a bush, while in places the ground is literally carpeted with wild flowers; amongst these I noticed the very elegant little Asphodelus fistulosus. The view of Albenga, situated up the valley at a little distance from the sea, as seen from near the railway station, is rather striking, the lofty brown towers of the cathedral standing out in bold relief against the mountains behind them. Albenga is a town of some importance, is the seat of a Sub-Prefecture and contains 5000 inhabitants. In 1794 it was occupied by the French, and in 1796 Napoleon made it his head-quarters. Madame de Genlis

lived for years at Lusignano near Bastia, a village a short distance up the valley.

There is an hotel here, Hotel d' Italia, placed nearly 400 ft. above the sea, where travellers can stay and from which doubtless many pleasant excursions can be made up the valley.

The valley with its surrounding mountains is both picturesque and fertile; looking up it from the back of the town a fine range of snow-capped mountains is visible, while sweeping by it runs the swift river formed of the combined torrents, Arossia, Ortonero, much the larger of the two, and Centa. The valley near the town contains a considerable number of deciduous trees; a few Orange and Lemon trees are met with here and there, mostly under shelter and the latter trained as espaliers; the vines are disposed in festoons, some of the wine produced being of good quality, while, lastly, various kinds of vegetables are extensively cultivated. From Albenga there is a carriage-road up the valley which after a short distance divides into two at Lecca; one road runs in a north-westerly direction, skirting the torrent of Arossia to Pieve di Teco, where it joins the route from Oneglia to Piedmont by the valley of Tannaro; the other pursues a more northerly and direct course by San Bernardo and Garessio, where it also joins the Piedmont route. Up the broad and extensive valley of Albenga many towns and villages are situated.

With respect to climate, Albenga is undoubtedly much colder than Alassio; the town is situated in a valley, down which at times the wind must blow with considerable force, and not far from which there is a range of snow-capped mountains. According to the old proverb, 'when there is snow on the mountains, there is cold in the valley.' The vegetation also affords corroborative evidence of the comparative coldness of the climate; of the actual temperature I am unacquainted with any reliable data. Formerly Albenga was considered to be unhealthy, owing to the proximity of marshes, some of which were utilised as flax-steeping grounds, but the marshes, I believe, no longer exist, and the operation of steeping is now carried on further from the town and near the sea.

CERIALE, LOANO, PIETRA, VEREZZI, FINALMARINA, AND NOLI.

After leaving the town the road traverses for a considerable distance the fertile and well-cultivated valley of Albenga, the Vine and different kinds of Fruit trees being grown here in large quantities. The soil in this valley, and in fact all along that portion of the Riviera, from Alassio on the one side to Finalmarina on the other, is of a pleasant reddish tint, due to the large quantity of iron it contains, rendering it well adapted to the growth of the Vine. The Genoa road now skirts, running for the most part on a level, a large and well shaped bay, facing nearly south fully 12 miles across and which terminates at Capo Noli, 876 feet high. The mountains immediately surrounding this bay present a varied and picturesque outline, but they are not of any great altitude and they are traversed by several valleys, through which at least four somewhat considerable torrents make their way to the sea, named respectively Varatella, Verzi, Maremola, and Porra. The beach is sandy. The towns in this bay are *Ceriale* with 1054 inhabitants; *Loano* 4300; *Pietra Ligure* 3300; *Verezzi* with Borgo and other villages near it, and *Finalmarina* with a population of 4200 persons. Of the first two places it is not necessary to give any particular description. Pietra presents a pretty appearance, the Church with its two towers occupying, as do most of the churches on this coast, a conspicuous position; but Verezzi is still prettier and more sheltered, lying as it does well under the hill. It is not probable that any of these towns will ever become health resorts and there is no accommodation for invalids. In the neighbourhood of Pietra and Verezzi there are many sheltered positions in which houses might be erected, and no doubt near these the climate in winter would be found to be mild, although not nearly so much so as that of the known health resorts of the Riviera. The land around these towns is well cultivated; but the Olive trees are not large, neither are they very abundant,

groups of Orange and Lemon trees are met with only sparingly and in the most favoured positions, where also they are more or less protected by walls. Given this exceptional protection and a good supply of water, both these trees will grow anywhere along the Western Riviera; the test of climate being not so much the presence of these trees as their abundance and the fact of their growing in the open air, without artificial protection.

Shortly after leaving Verezzi, the train passes through a long tunnel carried under Capo di Caprazoppa, at the end of which the view of the first portion of the very interesting and picturesque town of Finalmarina bursts on the sight, the second part being reached through another but very short tunnel.

Among the objects which catch the eye on the first view of Finalmarina from the railway station is a very large group of Cypress trees standing on a height, and remarkable for the regular and graceful way in which they taper to fine points, the effect produced being very curious.

The Genoa road here runs close to the sea, and if this be taken the railway tunnels are of course avoided and one then passes along the beach and through the quaint and primitive old town; it is seen that the fort of Castelfranco occupies a very commanding position, the rock on which it is built being clothed with the Prickly Pear or Opuntia, in the same way as the promontory of Monaco. One of the churches is really a beautiful building, and should certainly be visited. There is a theatre. The surroundings of Finalmarina are very beautiful and the pedestrian would do well to make it his head-quarters for a day or two and he would no doubt be able to obtain suitable accommodation at the Hôtel National, formerly an old Palace of the Ruffini family. This is a good place to taste some of the wines of the country, as white Orio, red Barolo, and Gattinara. The Porra torrent, already named, skirts the western side of the town. There are many houses scattered about, and several good situations where others might be erected.

From Finalmarina the railway passes through a series

of tunnels, but this part of the road is so beautiful that the train ought certainly to be forsaken and the road followed round Capo Noli, at least as far as the village of that name, a distance of about 6 miles. This, on the way to the point of the Cape, skirts two beautiful little shallow bays; along the first the road runs but little above the sea, which comes close up to it, the waves dashing against the rocks in a lively manner; along the second it ascends, the rocks gradually increasing in height; the beach is formed of fine sand. Further on as the extremity of the Cape is approached, the road attains an elevation of several hundred feet and for about two miles nothing can be more striking or grand than are the rocky mountains: at first the rocks overhang the road very dangerously; it then passes through a short tunnel and all the way is cut out of the very face of the rocks which rise perpendicularly from the sea to a height of nearly 900 feet. So high is the road above the sea that one turns giddy on looking down upon it, while overhead again the rocks rise to even a still greater height, presenting the most picturesque and grand outlines. At the base of some of the rocks, the sea breaks gently in green and white waves, from others it is thrown in showers of spray, while against others it dashes with great violence, producing loud reports and making the solid rocks vibrate and tremble.

Before rounding Capo Noli, on turning back and facing the west a very fine view is obtained of Loano, Ceriale and Albenga; of Capo Santa Croce, the island of Gallinara and the bay of Alassio, bounded on the west by the bold promontory Capo delle Mele. As the Cape is rounded, and the village of Noli is seen, the road passes through another curious tunnel, and shortly afterwards begins to descend; and here a glorious prospect meets the eye, of Noli itself, dominated by its fine old castle, of the bay with Spotorno in its centre, of the island of Bergeggi, and, far beyond, of a long coast-line dotted here and there with towns and villages and stretching far away even to Genoa.

After a short descent the village of Noli is reached, snugly ensconced in an angle of the small but picturesque

bay, in the middle of which lies, apparently well sheltered, the village of Spotorno with at the easternmost point Bergeggi and the small island of the same name. Noli is a large and very primitive fishing-village: the beach, from which there was a pleasant seaweed odour by no means common on the shores of the Mediterranean, was covered with many stout boats and a number of long nets spread

FIG. 9.

out to dry. The hauling in of the nets seemed to be continually going on, nearly everybody being engaged in the work ; many of the women were occupied in mending the nets, and the younger, barefooted, helping to drag them in ; the old men and women were sitting about in the bright sunshine, many of the latter busily spinning.

The costumes of the men notwithstanding the manifold patches of their garments, with their scarlet corsair-like caps, were often very picturesque.

On this day, the 9th of April, I came across many hundreds of the new year's Butterflies; some of the usual white kinds, and a few of the sulphur coloured, Rhodocera Rhamni, but the great majority consisted of that active, vigorous species the Painted Lady, Pyrameis Cardui. In warm nooks and corners, where both sand and flowers were met with, the air may be said to have been alive with them; they were likewise seen whirling in great quantities about the railway carriages, in the journey to and from Finalmarina and San Remo, in fact they were more numerous than I found them to be on the 15th of October, 1878, when on my way from Marseilles to San Remo.

The vegetation, such as it is, from Finalmarina to Noli is very curious and interesting. The rocky mountains are for the most part bare, and would be almost entirely so were it not for the great abundance of Euphorbias, which spring from every crevice of the rocks and some of which are as large as good-sized bushes, as Euphorbia characias and E. dendroides, L., the latter being the same species which grows so abundantly and attains such a size between Mentone and Monaco; but other kinds were noticed, one of these being Euphorbia Paralias L.: many shrublike specimens of Anthyllis Barba-jovis and several species of Crassulaceæ were also seen, as Sedum altissimum Poir, and S. hirsutum Al., as well as the Samphire, Crithmum maritimum L.

There were besides many beautiful wild flowers, including Lotus cytisoides Al.; the brilliantly coloured Stock, Matthiola incana R. Br., which was seen growing from the rocks in most inaccessible positions in large masses; the blue Linum, L. angustifolium Huds.; the elegant Asphodelus fistulosus, and, though last not least, that singularly beautiful malvaceous plant, Lavatera punctata.

I was sorry to leave Noli, in which I would gladly have stayed a day or two, to watch the simple ways and habits of the people, and to enjoy the beauty of the sur-

rounding coast. There is an hotel here, Hôtel de la Poste, and an inn which bears the pleasing name of Albergo del Sole. I would recommend a stay of a few hours at least to be made at this place. The road to *Spotorno* is very pretty, the first portion being skirted by some high rocks; afterwards in quick succession *Bergeggi*, *Porto di Vado* and the town of *Vado* are reached; none of these places require any special notice, the inhabitants being occupied chiefly in the making of crockery, bricks, tiles and glass bottles. In about a quarter of an hour after leaving Vado the train stops at

SAVONA.

Here the railway is joined by that from Turin and owing to this junction and a commodious port, Savona has become a place of much importance. It contains nearly 25,000 inhabitants; a great part of the town has been rebuilt and it now presents a handsome and imposing appearance. Savona does not possess any reputation as a health resort, and I am unacquainted with any statistics having reference to its temperature and climate, but since it is not protected by any high encircling mountains and lies at the extremity of the valley, down which runs the railway from Turin, its temperature in winter must be much lower than that of many other places along the Western Riviera. Orange trees are seen in sheltered situations only.

ALBISSOLA AND VARAZZE.

The first place of any importance after leaving Savona is *Albissola*; this consists of an upper village and a lower one on the sea, the two containing about 4000 inhabitants. The surrounding country is very pretty, and produces vegetables and fruit, such as apples, pears and cherries in large quantities. The Olive trees are somewhat scattered and no Lemon or Orange trees were seen. Just out of the village are several potteries, and near is a valley traversed

by a carriage-road, and flowing through the valley the large stream Sansobia.

About two miles further on is the curious village of *Celle* close on the sea-shore: on its eastern side numerous Olive trees of small size are seen, but no Orange trees and few Lemon trees, the latter growing under walls. The road after mounting a small promontory, descends to *Varazze*, a town of nearly 8000 inhabitants and distant from *Celle* about 2½ miles. Here sails are made, anchors forged and vessels built; it is hence a thriving little town. The environs are very pretty, it is surrounded first by hills mostly Fir-clad at the top, with Olive trees below, and then by mountains, some of which are also covered with Firs. There is a pleasant valley behind the town, traversed by a somewhat considerable stream, the Teiro. Many Lemon trees are grown here, a few in the open but most of them trained against walls, which however are not very high. The space enclosed by the surrounding hills is not considerable, but there are many sheltered situations, especially to the north-east, where houses might be erected, but the temperature in winter, as shown by the vegetation, is certainly some degrees colder than that of some of the chief health resorts of the Western Riviera.

MONTE GROSSO.

The road now ascends considerably and running at a little distance from the sea skirts for about 3½ miles *Monte Grosso*, which has an elevation of 1319 feet. The whole of this route to Cogoleto is very beautiful and entirely different from anything I have met with elsewhere in the Riviera. The hills which form part of Monte Grosso and which rise several hundred feet above the road are covered with trees; in fact the road passes through Firs, Umbrella Pines, Carouba trees, Cypresses, Evergreen Oaks, and Arbutus trees, some fine shrubs of Phillyrea angustifolia being also noticed, with here and there just enough Olive trees to afford evidence of the comparative mildness of the

climate. Among the wild flowers which attracted attention was a curious species of Orchis of a reddish colour, Serapias Lingua L. This district is a particularly interesting one and it at once became clear to me that it possesses certain special features, rendering it eminently adapted for a Health Resort of a different character to any of those now existing along the Riviera. Many invalids, especially some of those suffering from diseases of the chest, find the climate of Cannes and Nice so exciting and stimulating that they become feverish and cannot sleep and hence have to be sent to places of a more sedative character; against some of these places, however, it may be urged either that they are too far away from the sea, the admitted beneficial action of a marine atmosphere being thereby lost, or they are too damp to allow of any marked improvement taking place, although the nervous symptoms may be relieved by the change. Now, Monte Grosso seems to combine all the advantages desired in the class of cases to which I have referred. There is the marine atmosphere, but at such a height above the sea that the noise of the waves would never be disturbing; there is a dry, sandy soil; there is almost mountain elevation with yet plenty of room for walking exercise, and there are the hills so clothed with Fir trees, Lentiscus and Juniper that the whole atmosphere is filled with a pleasant balsamic odour. The site therefore is one admirably suited in every respect for a Health Station.

On the descent from Monte Grosso by the Cornice road and shortly before reaching Cogoleto, we come upon a charming little Alpine valley in which many plants interesting to the botanist will be found. I saw growing near the roadside, Anthericum Liliago, with its pure white blossoms, and close to it a somewhat rare fern, a species of Acrosticum, the under surface of the fronds being white and woolly; also the very handsome Antirrhinum, A. majus. This valley is crossed by a small stone bridge; the road, skirting the other side of the valley for a short distance and then turning sharply to the left, rounds the

headland Cap d'Invrea, which forms the western boundary of the bay in which Cogoleto is situated. From this cape on a clear day there is a splendid view, on the one side of Genoa and the coast beyond it, and on the other of Capo Noli. On the descent to the bay a large iron foundry is noticed on the left, at the termination of a valley through which runs the river Larestra, and a little further on is

COGOLETO.

The village of Cogoleto with about 2500 inhabitants is distant about three miles and a half from Varazze. This village, the reputed birthplace of Columbus, is situated about the centre of a small and pretty bay surrounded, first by hills clad with Firs at the top and a few Olives below, and then by an amphitheatre of bare mountains of picturesque outlines. The village itself consists of one long narrow street, through which the Genoa road runs. As in many of the other villages, fishing and shipbuilding are carried on here. While passing through it I noticed three things: the magnitude and fresh appearance of the branches of Fir in front of the wine shops; the large rounded and polished boulders of black marble distributed about and used as seats; and, lastly, the brilliant costume of some of the more elderly women who wear a kind of shawl or long scarf combined in one, printed in chintz-like patterns of the brightest and most striking colours, the effect produced being quite Oriental. I have seen a similar costume occasionally in the streets of Genoa. There are a few nice-looking villas scattered about with room for some more, although the space enclosed is not considerable. There were very few Olive trees, but many Vines and some Lemon trees, trained as usual against walls. I also noticed an Aloe in flower. A little way out of the village on the east is a valley with a good carriage-road running up it, and flowing through it the little river Lerone.

The road from Cogoleto for a short distance is parallel

with the railway, and soon reaches a bridge which crosses a torrent, the valley through which it passes presenting, from the number of Fir trees which it contains, somewhat of an Alpine character. The Genoa road runs along this valley, which is here very beautiful, for a considerable distance, the valley below and the rocky mountain above it, being clothed with a great variety of evergreens, including amongst others the Fir, Holly, Evergreen Oak, Buckthorn and Juniper. After a time it turns suddenly round to the right, crosses the bold headland Capo Gorbo, where it is less steep, and winding still more round to the right enters a valley from which there is an enchanting view of one of the most charming places of the Riviera, Arenzano.

ARENZANO.

The valley itself both up and down is exceedingly pretty and fertile. The rocks by the roadside, when I saw them, were enlivened by the bright golden blossoms of a species of Coronilla which was growing there in handsome bushes. On the other side of the valley stands the handsome church, which possesses a beautifully soft peal of bells, rare in this part of the world, and which were giving forth their sweet music as I walked down the valley to the village of Arenzano. This village, in which there are some very nice-looking villas, stands in the centre of a small bay and is surrounded on the east, north-east, and partly on the north by a picturesque bare mountain, Monte Tardia, which rises to an altitude apparently of about 3000 feet and which shelters the town very effectually from the colder and more objectionable winds. There is a very fine view from Arenzano eastward of the coast with its several towns as far as Genoa and even to Capo Portofino, and westward of the coast, to Capo Noli. I noticed many fine Olive trees, a few Orange and a great many Lemon trees, the latter trained as usual against walls, but showing themselves freely above their shelter. It is said that in winter flowers are daily despatched from Arenzano to colder and less favoured places. It is evident from the

completeness of the protection on the east and north-east and from the character of the vegetation that the climate of Arenzano must be exceptionally mild. The space enclosed is not large and there is no room for a town; indeed one would be sorry to see this quiet and very beautiful retreat thus transformed, but it would be really a great advantage if there were a good hotel here, built with taste and in a style suited to the place: it could not fail to be successful; numbers of persons would be attracted to it by the beauty of the place and the mildness of its climate. It is impossible to judge of this charming little town by the view obtained of it from the train.

VOLTRI.

The walk from Arenzano to Voltri, rather over four miles is very pretty, it passing for some distance under high shelving rocks and Fir-clad hills, until just before the town is reached the valley and torrent of Cerusa are crossed. The town of Voltri presents a handsome and flourishing appearance; there are many large mansions scattered about it, and the mountains around present a picturesque appearance. It contains nearly 14,000 inhabitants and is noted for its paper manufactories.

On the east of Voltri is the valley which leads to the celebrated Sulphur Springs so much used by the Italians, and which issue copiously near a chapel dedicated to the Madonna della Acqua Santa, by whose intercession the water is believed to be endowed with its healing properties. The vegetation around consists principally of deciduous trees: there are very few Olive trees and no Orange or Lemon trees were seen, and hence it may be inferred that the climate is much less mild than that of many of the other towns along the Riviera.

PRA.

The distance from Voltri to Pra is nearly two miles, and the road presents nothing very remarkable. The hills are clothed with Firs and a few Olive trees here and there.

Pra is a small town of nearly 5000 inhabitants; its chief industries are boat-building and fishing. There were no Orange or Lemon trees to be seen, but principally deciduous trees.

PEGLI.

Within little more than a mile from Pra is the quiet and primitive bathing and fishing town of Pegli, with 5000 inhabitants, stretching for a considerable distance along the pebbly shore and with the high or Genoa road running through it. The town itself is by no means interesting, it is surrounded by several hills more or less clothed at the top with Fir trees, and lower down by Evergreen Oaks and deciduous trees, and beyond the hills are mountains at a considerable distance off: these are not very lofty, particularly to the north, and although the scenery around Pegli is pretty and picturesque it is by no means equal to that of some of the other towns of the Riviera, especially Arenzano, which is only about 13 miles distant from Genoa. Behind the town is a long valley with a somewhat considerable stream, the Varenna torrent, running through it and emptying itself into the sea a little to the east. The view from Pegli resembles very much that from some of the neighbouring towns, and extends on the one side as far as Genoa and even Capo Porto Fino, and on the other to the grand promontory or headland of Capo Noli. The Olive trees here are but few in number and small in size, contrasting unfavourably with those on other parts of the coast more to the west. There is scarcely an Orange or a Lemon tree to be seen anywhere about, except in a very few particularly well sheltered situations, as in the gardens of the Villas Doria and Pallavicini, where the Lemon trees are trained under walls some ten or fifteen feet high; very few Palm trees are visible and none of great age, nor are there any fine specimens of the Eucalyptus; indeed the evidences of an exceptionally warm and southern climate are to a large extent wanting, and one is led to think that were it not for the proximity of Genoa, Pegli would scarcely have

been thought of as a health resort and that the 'raison d'être' is its vicinity to that great city. Those residing in Genoa and who require a little change and more quietude than is to be obtained there will find Pegli a pleasant place of sojourn for a short time. The extensive, beautifully laid out and richly adorned grounds of the Villa Pallavicini with its temples, kiosks, grottoes, Chinese pagoda, Egyptian obelisk and little lakes with their boats, form one of its chief attractions. There are several good hotels, many villas, a very small church, and an English medical man.

SESTRI.

About two miles further on is Sestri, a flourishing manufacturing and shipbuilding town, with about 10,000 inhabitants. Behind it is a hill crowned with the chapel of La Madonna del Gazo, which has a colossal statue of the Virgin, and from this chapel the view is very fine. The Villa Serra is noted for its hanging gardens. The vegetation around Sestri consists of vines and several kinds of deciduous trees; there are but few Olive and no Orange or Lemon trees. It cannot be said to possess an exceptionally mild winter climate.

CORNIGLIANO.

Three miles from Genoa is Cornigliano, in the main a manufacturing suburb of that city, the factories and houses of business stretching away along the shore to San Pier d'Arena and thence to the lighthouse of Genoa itself; it is very populous, and the road from it to Genoa is by no means attractive and is constantly traversed by tramways, omnibuses and diligences.

To the east of the town is the large valley up which runs the railway over the Apennines to Alessandria and through which flows the river Polcevera. The valley is said to be very pretty, and there are some good houses and

villas in the more inland portion of the town; there is also the Grand Hôtel Villa Rachel in a good situation. Of the vegetation here, and indeed as far as Genoa, little can be said, as there are but few trees or shrubs of any kind.

Cornigliano possesses some reputation as a winter residence, and there is even a Chaplain and an English medical man there.

GENOA.

About three miles from Cornigliano, the tall and slender lighthouse is reached which, all along the coast, marks the situation of Genoa. In turning the point on which this stands, Genoa 'la Superba,' with its spacious port filled with vessels, its handsome streets, edifices and churches, and built upon the sides of a semicircular range of hills, comes full into view; a city well deserving, from the beauty of its situation and its imposing appearance, the proud designation which has been bestowed upon it. Behind the range of hills rise lofty mountains running in a north-easterly direction.

Genoa marks the termination of the Western Riviera, or Riviera di Genova; it is situated in lat. 44° 25′ and contains nearly 140,000 inhabitants. It is needless to attempt any detailed description of a city so large and so well known; it is sufficient to say that it abounds in fine streets, palatial residences, splendid churches and other public buildings; that it is in fact a city replete with every comfort, luxury and adornment. Being built upon the side of a range of hills, the streets run upon different levels; the ascent to some of them is steep, especially in the older portions of the town, many being inaccessible to carriages.

The views in and about Genoa are very fine, that from the lighthouse has already been noticed: it embraces an extensive coast-line eastward, as far as the rugged promontory of Porto Fino, and westward to Capo delle Mele; and from the lighthouse also the city itself is seen to the

greatest advantage, the effect being greatly heightened by its semicircular form.

Another very beautiful view of a different character is from the gardens of the Acqua Sole, of the well-wooded and picturesque Bisagno Valley with the mountains beyond and the blue Mediterranean at the termination of the valley. The drives around Genoa are not particularly attractive. Genoa is so strongly fortified that it is said to be impregnable.

With respect to the climate of Genoa it has been stated that rain falls on 131 days in the year; that the mean temperature of the three winter months is 46·50°; that snow falls on the average on six days in the winter; that January is the coldest month, when often there is frost; and that the north and north-easterly are the prevailing winds, these being sometimes very piercing. From these particulars, it is evident that Genoa is more wet, and much colder than any other place of any note along the Western Riviera. The inferences derived from the meteorological data are fully corroborated by the facts as regards the vegetation. There is almost a complete absence of Olive, Lemon and Orange trees, there are scarcely any Palms, none of any size or age, nor did I meet with any noticeable Eucalyptus trees, and few evidences indeed were anywhere to be seen of that southern vegetation which so abounds along the more sheltered portions of the Western Riviera and which furnishes such incontrovertible evidence of the great mildness of the climate. In the gardens of the Acqua Sole, the principal trees were deciduous or consisted of evergreen Oaks or other trees of a comparatively hardy character. Genoa cannot therefore be regarded as a winter station, neither is it a desirable place for an invalid to sojourn in on his way home after having spent the winter in one of the favoured health resorts of the Western Riviera. It is a city of great interest and beauty, and those who are fairly well and strong would incur no risk in wintering there, and they would find the climate brighter, more sunny and warmer than that to be met with anywhere in Great Britain.

INDEX.

ACA

ACACIA, the, 89, 228
— A. Farnesiana, 93, 240
Air, dryness of, at San Remo, 74
— — at other health resorts, 74
— tension, 75
— relative humidity, 75
Alassio, 250, 252
— bay of, 251
— Island of Gallinara, 251
— mountains surrounding, 251
— fish, 252
— walks around, 252
— sandy beach, 252
— vegetation, 252
— meteorology and climate, 253
Albenga, 255
— vegetation, 255
— valley of, 256
— climate, 256
Albissola, 262
Allium, 100
— several species of, 100
Aloe, the, 90
Alpes Maritimes, 2
Anemone, the, 98
— A. coronaria, 98
— A rosea, 98
— A. stellata, 98
— A. pavonina, 98
— A. hepatica, 98. 190
Animal productions, curious, 124
Anthyllis Barba-jovis, 261
Arbutus or strawberry tree, 94
— fruit of, 41
Arenzano, 266

BOR

Arenzano, beautiful situation, 266
— vegetation, 266
— climate, 267
Arum Arisarum, 96
Italicum, 100
Asphodelus albus, 190
fistulosus, 261
Antirrhinum majus, 264
Anthericum Liliago, 264
Araucaria excelsa, 225

BAMBOO or cane, 89
Banana, the, 91
Beaulieu, 228
— climate of, 228
Bellevalia romana, 97
Bernardo Valley, the, 197
— Chapel of San Bernardo, 198
— Madonna di Bonmoschetto, 198
— Colla, 198
Bergeggi, 260, 262
— Island of, 260
Bestagna Valley, the, 159
— Church of San Pietro, 160
— Croce di Parà, 160
— Chapel of Villetta, 162
— to the bridge, 162
Birds, evidence of climate shown by, 116
— list of, 117
— sale of small, 38
— slaughter of, 43
Bordighera, situation, 204
— number of rainy days, 59

BOR

Bordighera, temperature, 71
— climate, 208
— Palm groves, 207
Bournemouth, number of rainy days, 60
— rainfall, 61
— temperature, 76
Breezes, sea, 54
— land, 55
Bussana, 172
Butterflies, 119
— painted lady, 119
— red admiral, 175
— clouded yellow, 175
— speckled wood, 119
— small garden white, 119
— large garden white, 119
— pale brimstone, 175
— the swallow tail, 175
— abundance of, 175
— non-hybernation of, 120
— evidence of mildness of climate shown by, 119

CACTI, 102
Camphor tree, the, 88
Cannes, 237
— number of rainy days, 59
— rainfall, 61
— temperature, 73
— days of sunshine, cloud, and rain, 79
— situation, 238
— surroundings, 238
— old town, 238
— new town, 239
— vegetation, 239
— Grasse, 238, 240
— Esterel mountains, 240, 242
— Iles Ste. Marguerite and St. Honorat, 238, 242
— walks and drives, 241
— drainage, 241
— refuse of town, 242
— water supply, 241
— climate, 242, 244
— mistral, 242
— meteorology, 243
Caper plant, the, 101

DAY

Capo Verde, 169
— Madonna della Guardia, 169
Carabaçel, 235
— a suburb of Nice, 235
Cardon, 38
Carouba tree, the, 88, 226
Castor oil plant, the, 92, 208
Caterpillar, the Processional, 124
Celle, 263
Ceriale, 257
Ceriana Valley, the, 170
— Poggio, 171
— Ceriana, 173
Cephalanthera ensifolia, 214
Cervo, 250
Chestnut, Spanish, the, 41, 90
Chicory, 38
Cimiez, 236
— situation, 236
— climate, 237
Cistus, or rock rose, 95, 156, 190
Climate, 49
— of the Riviera, 49
— dryness of, and vegetation, 101, 103
— evidence of mildness of, from plants, 104
— beneficial effects of, in lung diseases, 141
Clothing suitable, 146
Cneorum tricoccum, 95
Cogoleto, 265
— vegetation of, 265
Convolvulus althæoides, 101
Cornigliano, 269
— suburb of Genoa, 269
— comparative absence of vegetation, 270
Coronilla, the, 95
Cork tree, the, 87
Cowslip, the, 190
Crassulaceæ, 101
— samphire, 101
Cuttlefish, 38
Cypress, pyramidal, 88, 227

DAISY, the, 96
Daphne, the, 190
Days of sunshine, cloud, and rain at San Remo, 78

DAY

Days at other health resorts, 78
Diano Marina, 249
— situation, 249
— climate, 250
— vegetation, 250
Dolceacqua, 205

EASTERN RIVIERA, the, 1
Erythronium dens canis, 101, 190
Eucalyptus, the, 86, 113
Euphorbia, the, 95, 102, 226, 261
Euphorbia dendroides, 227, 261
— characias, 261
— Paralias, 261
Eze, 228
— climate of, 228

FERNS, 102
— maiden hair, the, 168
— maiden hair spleenwort, 102
— scaly spleenwort, 102
— black maiden hair spleenwort, 102
— acute spleenwort, 102
— polypody, 102
— lycopodium, 102
— acrosticum, a species of, 264
Ficaria ranunculoides, 100
Fig tree, the, 89
Figs, 40
Finalmarina, 258
— grand road to Noli from, 259
Firefly, the, 124
Fish, mildness of climate shown by, 118
Flora San Remese fotografata, la, 99
Flowers, wild, 94
— scent-giving, 93
— annuals become perennials, 90
— profusion of wild, 101
Flying grasshopper, the, 124
Foce Valley, the, 191
— Chapel of San Bartolomeo, 191
— — — San Lorenzo, 192
— Mossé Valley, the, 195

MAR

Foce Valley, walk in, 196
Fungi, kinds eaten, 39

GENTIAN, species of, 190
Genoa, 270
— situation and beauty, 270
— vegetation, 271
— climate, 271
Geology of the district, 46
Gladiolus, 99
Grape, the Croairora, 40

HELLEBORE, the, 190
Hepatica, the, 98
Hospital for lepers, 10
Humming bird moth, 119
Hyacinth, the, 97
— oriental, the, 97
— grape, the, 97
Hyacinthus comosus, 97

INSECTS, mildness of climate shown by, 119
Iris, 99
Irrigation, 103

JUNIPER, the, 94

LAIGUEGLIA, 251, 252
Latte, hamlet of, 211
Lavatera punctata, 101, 261
Lemon tree, the, 87, 110
Linum angustifolium, 261
Loano, 257
Lotus cytisoides, 261

MADONNA della Costa, 10
— — Guardia, 169
Mantis, the Praying, 124
Marguerite, the, 93, 98
Marina d'Andora, 251
Martino Valley, the, 163
— the Chocolate Mill, 164
— the Corn Mills, 166
— Verezzo, 167

MAT

Matthiola incana, 261
Mediterranean, fish of, 35
— scarcity of fish in, 37
— list of fish eaten, 37
— warmth, 62
— depth, 63
— saltness, 64
— freshness, 55
— not tideless, 56
Mediterranean heath, the, 94
Medlar, the Japanese, 211
— — fruit of, 40
Mentone, 212
— number of rainy days, 58
— rainfall, 61
— temperature, 72, 220
— days of sunshine, cloud, and rain, 78
— situation, 212
— encircling hills and mountains, 213
— Carei Valley, the, 213
— Boirigo Valley, the, 214
— Gorbio Valley, the, 214
— eastern portion, 215
— western, 215
— the old town, 215
— cemetery, 216
— Mentone Valley, the, 216
— Valley of St. Jacques, 216
— walks and drives, 217
— red rocks, 218
— bone caves, 218
— vegetation, 218
— meteorology, 220
— climate, 219
Meteorological observations, 64
— variations of temperature, 65
— division of seasons, 66
Mistral, 51, 242
Monaco, 223
— situation, 223
— old or upper town, 224
— new or lower, 224
— climate, 226
Monte Carlo, 225
— casino, 225
— village, 226
— climate, 226
Monte Bignone, 2, 188

ONE

Monte Grosso, 263
— situation, 263
— vegetation, 263
— special features of, 264
— likely to become important health resort, 264
— climate, 264
Mosquito, the, 121
Myrtle, the, 94

NARCISSUS, 98
— several species of, 99
National Hospital for Consumption and Diseases of the Chest, 141
— results of treatment of cases at, 141
Nectaroscilla hyacinthoides, 103
Nice, 230
— number of rainy days, 59
— rainfall, 61
— temperature, 73
— days of sunshine, cloud, and rain, 79
— situation, 230
— Paillon river, 230
— palm trees, 231
— Promenade des Anglais, 231
— vegetation of, 230, 237
— sea birds at, 231
— surrounding mountains, 232
— climate, 232
— opinions of writers as to climate, 232
Nervia, valley of, 204
Noli, 259
— fishing at, 260
— vegetation near, 261
Norfolk Island pine, 225

OLEANDER or rose laurel, 89
Olive tree, the, 87, 105
— forests of, 87
— groves of, 109
Olives, gathering of, 106
Olive oil, process of obtaining 107
Oneglia, 248

ONE.

Oneglia, *situation*, 248
— description, 248
— climate, 249
— vegetation, 249
Orange tree, the, 87, 112
Orchids, 101
— bee orchis, 101
— barilla longibracteata, 101
— ophrys fusca, 190
— serapias lingua, 264
Ospedaletti, 202

PALMS, 87
— date-bearing, 91
— fan-like, 91
— groves of, 207
Pegli, 268
— situation of, 268
— vegetation, 268
— climate, 268
Pepper tree, the, 88, 114
Phillyrea angustifolia, 263
Phthisis, 151
— suitable summer resort for, 151
— Dr. Richardson's Atlantis for, 151
— Alpine stations for, 140
— beneficial effects of climate in, 141
Pietra Ligure, 257
Pigna, 205
Pines, 88
— umbrella pine, 88, 240
— pinè forests, 91
— maritime pine, 91
— Aleppo pine, 91
Pistacia Lentiscus, 88
Plane, the oriental, 90
Pomegranate, the, 40, 89
Precautions to be observed by invalids, 145
Prickly pear, the, 90, 115
— broom, the, 94
Primrose, the, 190
Porto Maurizio, 245
— situation, 246
— climate, 247
vegetation, 247

SAN

Pra, *267*
— vegetation, 268

QUERCUS Suber, 87

RAINFALL, 56
— — table of, 61
Reptiles, mildness of climate shown by, 118
Riviera, geology, 46
— climate, 49
— winds, 50
— sea and land breezes, 54
— rainfall, 56
— temperature, 61
— winter in, 79, 139
— vegetation; 86
— — chiefly evergreen, 90
— mildness of climate shown by vegetation, 104
— effects of dryness of the air, 138
— excitability, 138
— sleeplessness, 138
Rock rose or cistus, the, 95
Rosemary, the, 95
Roya, the, 209

SALSAFY, 38
Samphire, 101
San Francia Valley, the, 154
— chapel of San Giovanni, 156
— the Olive Mills, 157
— Chapel of San Michele, 158
— Chapel of San Giacomo, 158
San Remo, 1
— situation, 1
— the bay, 1
— hills and mountains, 2
— views, 3
— protection from wind, 3
— history, 3
— the old town, 6
— architectural peculiarities, 6
— the new town, 10
— English church, 12
— Vice-consulate, 12
— west suburb, 13

SAN

San Remo, east suburb, 14
— railway station, 15
— port, 16
— sea baths, 16
— Campo Santo, 17
— the sanitary condition, 18
— the water supply, 18
— necessity for a new supply, 21
— rain water, 21
— the drainage, 21
— the town refuse, 23
— the San Remese, 24
— servants, 26
— washing, 27
— dress of San Remese, 30
— walks and drives, 31
— amusements, 32
— food supplies, 34
— fish, 35
— sale of small birds, 38
— vegetables, 39
— fungi, 39
— fruit, 40
— curious articles of food, 42
— slaughter of small birds, 43
— geology of district, 46
— prevailing winds, 50
— sea and land breezes, 54
— number of rainy days, 58
— amount of rainfall, 60
— temperature, 62, 66
— daily range of temperature, 69, 75
— dryness of the air, 74
— tension of the air, 75
— temperature of, contrasted with London, 77
— days of sunshine, cloud, and
— rain, 78
— opinions respecting, 80
— flowers in October, 92
— — early spring, 92
wild flowers, 91
— — — profusion of, 101
— creepers, 93
— flora of, 116
— characteristics and effects of climate, 127
— diseases for which the climate is suited, 128

TAG

San Remo, diseases for which the climate is unsuited, 129, 131
— opinions as to climate, 131
— diseases from which natives are exempt, 134
— — to which natives are liable, 135
— saline matter in the air, 137
— choice of a residence, 142
— want of an esplanade, 143
— want of paths up valleys, 143
— precautions to be observed by invalids, 145
— times of arrival and departure, 148
— a winter's residence abroad insufficient, 150
San Romolo Valley, 181
— west side of valley, 181
— across the bridge, 182
— to the Madonna del Borgo, 183
— the eastern side of the valley, 185
— San Romolo, 196
— Piano del Rè, 188
— Monte Bignone, 188
Sarsaparilla, species of, 95
Savona, 262
— climate, 262
Saxifraga cuneifolia, 190
Scorpion, the, 124
Sea urchins, 43
Sedum Dosyphyllum, 93
— altissimum, 261
— hirsutum, 261
Sempervivum arachnoideum, 190
Service tree or Sorbe, 41
Sestri, 269
— vegetation, 269
— climate, 269
Shell fish, kinds eaten, 43
Spartium junceum, 95, 156
Spider, the trap-door, 124
Spotorno, 260, 262
Star of Bethlehem, 99
Suitable summer resort, 151

TAGGIA Valley, the, 176
Taggia, 178
— Castellaro, 179

Taggia valley, Madonna di Lampeduza, 179
Temperature, 61
— of San Remo, 66
— of other health resorts, 71
— table of, 81
— of health resorts contrasted, 74, 76
— daily range of, 75
Terebinthinus Chio, 89
Thistle, the, 100
— Galactites tomentosa, 100
Tomatoes, 39
Torquay, number of rainy days, 60
— rainfall, 61
— temperature, 76
Trees, evergreen, 90, 102
— deciduous, 90
— fruit, 90
Tulip, 99
— scarlet, 99
— lady, 99

UMBILICUS pendulinus, 100

VADO, 262
— Porto di, 262
Vallée des Oliviers, 168
Var, embouchure of, 238
Varazze, 263
— vegetation, 263
Vegetation of Riviera, 86
— between Mentone and Monaco, 229
— between Monaco and Villefranche, 229
Ventimiglia, 208
— description, 208
— Roya at, 209
— climate, 210
— not a health resort, 210
— fortress, 210
— conglomerate at, 210
Ventnor, number of rainy days, 59
— rainfall, 61
— temperature, 76
— National Hospital for Consumption at, 141
Verezzi, 257
Villefranche, 227
— situation, 227
— as a health resort, 229
Vinca minor, 101
Violet, the, 97
Voltri, 267
— sulphur springs at, 267
— vegetation around, 267

WESTERN Riviera, the, 1
Wild thyme, the, 96
Winds, 50
— mistral, 51
— southerly, 52
— sirocco, 52
— table of, 53
— northerly, 50

ZONITES algirus, 164

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